JANUARY '61

MODERN TEXTILES MAGAZINE

Specializing in Man-Made Fibers and Blends since 1925

FIBERS

FABRICS

FINISHES

Cameo's MARVIN & BERNARD ROSENBERG—curtains are big business—story page 21

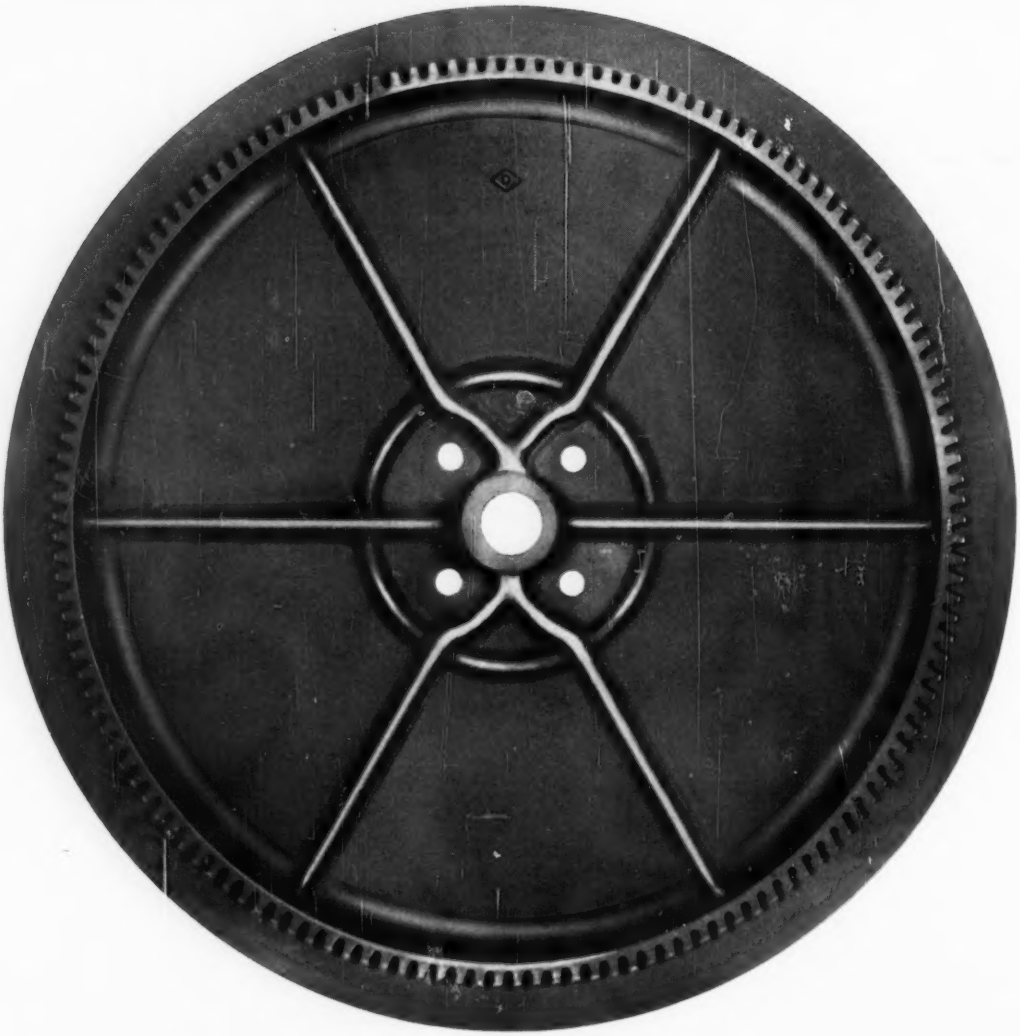
HOME FURNISHING FABRICS IN 1961

The status of performance standards

Finishing blended fabrics

Sonoco's new research center

AND NINE MORE USEFUL ARTICLES AND EXCLUSIVE REPORTS



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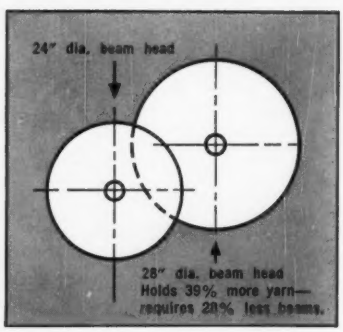

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The Principal Trade Groups

American Association of Textile Chemists and Colorists ..... Lowell Techn. Inst., Lowell, Mass.
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American Cotton Manufacturers Institute, Inc. ..... 1501 Johnston Bldg., Charlotte, N. C.
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Textile Distributors Institute, Inc. ..... 469 Seventh Ave., New York

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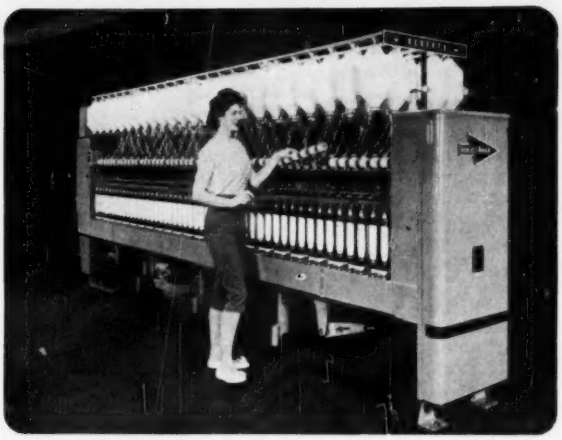
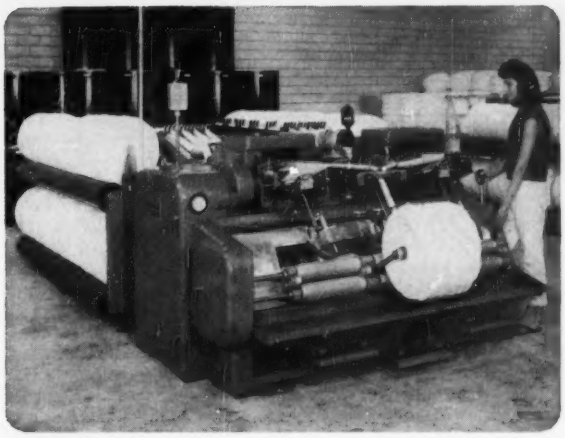
YARN MAKING MACHINERY

ROBERTS NEWS

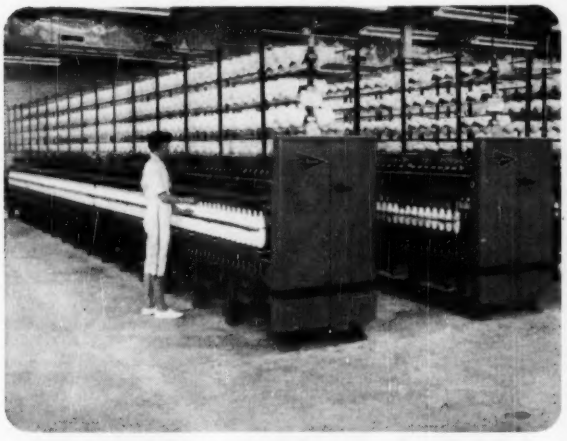
COTTON, WORSTED OR LONG FIBER SYSTEMS



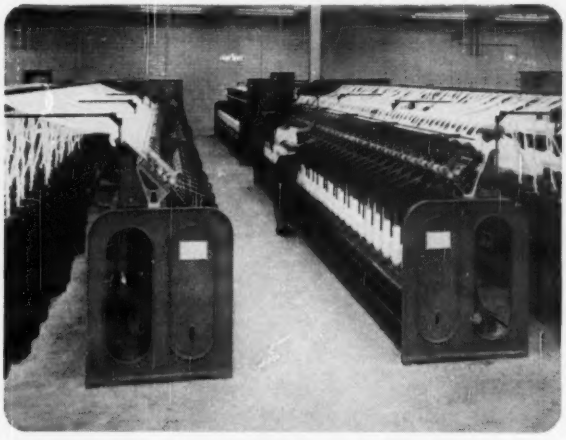
ROBERTS ARROW SPINNING for both cotton system and long fiber system yarn spinning for natural and synthetic fibers and blends. High speed, all ball bearing, big package Arrow Spinning Frames in 25-inch or 36-inch width. Exceptional flexibility and simplicity of operation in the manufacture of improved quality yarns at reduced costs and modest initial investment.



ROBERTS-TEMATEX worsted system preparatory machines, including ParaBlenders, ParaDrafters and AutoEveners, are rugged, high performance machines for pinning, parallelizing, drafting and blending worsted and synthetic fibers prior to roving and spinning, and in top making plants. AutoEvener automatically and instantaneously corrects delivered sliver weight to within plus or minus 1%.



ROBERTS TWISTERS for plying yarns are completely ball bearing equipped and designed for high speed ring twisting operations. 25- or 36-inch frames. Up to 3½-inch rings and 12-inch bobbins. Package weights 1¼ pounds on cotton, ¾ to 1 pound on worsted.



ROBERTS ROVING FRAMES are ball bearing rebuilt and feature all-new heavy duty ball bearing Roberts Double Apron Drafting Systems for cotton, short staple or long fiber synthetics, worsted and blends. 10x5 and 12x7 packages. Provisions for double headed spools.

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ROBERTS COMPANY

SANFORD, NORTH CAROLINA

Du Pont Reveals New Orlon Types

Du Pont has developed two new modified types of Orlon acrylic fiber a conference of yarn spinners at the company's headquarters in Wilmington, Delaware, was told last month. Also made known to the 150 spinners attending the conference were price adjustments that increased the price of Orlon Type 42 three denier and six denier staple and tow two cents a pound to $1.30 and $1.20 respectively, and reduced the price of Orlon Sayelle, Type 21, three denier eight cents a pound to $1.45, and six denier ten cents a pound to $1.40.

A new type of Orlon Sayelle bi-component acrylic fiber for use in fine gauge, full-fashioned sweaters was made known at the conference. It is called Orlon Sayelle Type 24. The new product is available in three denier cut staple and is priced at $1.45 a pound. The same fiber in six denier staple and tow will go into production in the near future. Du Pont spokesmen said that the new Type 24 will make possible a crisper hand, and will be useful in the new trend toward lighter, more clearly defined stitch constructions in knitwear. It is expected to provide new uses of Orlon Sayelle in garments, especially menswear.

The second new Orlon product announced at the conference is Type 44, an acid dyeable tow. It is a 6 denier semi-dull Orlon produced in a tow bundle of 470,000 total denier and is intended for processing on the Turbo Stapler in a manner similar to Type 42 Orlon with certain processing modifications. In the six denier form, Type 44 Orlon is priced at $1.23 a pound. It is expected to be produced soon in three denier also at a price of $1.33.

A detailed report on these new types of Orlon along with an exhaustive discussion of the entire range of Orlon acrylic fibers and Du Pont's program for marketing them will appear in this magazine next month in the section devoted to "Papers of the American Association for Textile Technology."

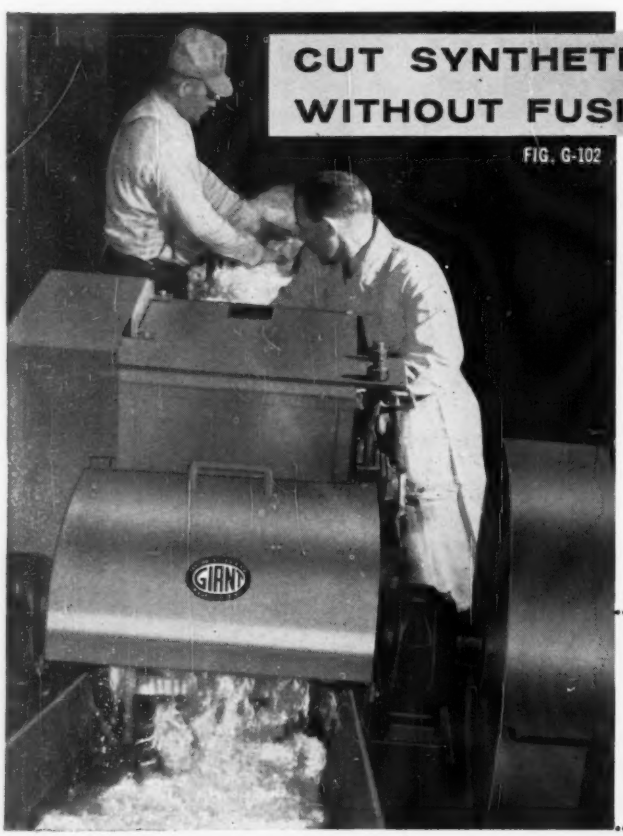
Allied's New Caprolactam Process

Allied Chemical Corp. has acquired a new process from Snia Viscosa of Italy for manufacture of caprolactam. The new process, not yet in commercial use, was developed by Snia Viscosa from whom Allied acquired exclusive rights for the U. S. and Canada.

The process differs from that currently in use by Allied, the sole producer of caprolactam in this country. Starting with raw material toluene instead of phenol, the addition of the Snia Viscosa process to Allied's Hopewell, Pa., complex, is expected to provide Allied with broad flexibility in its operations, including the production of derivatives and intermediates of commercial importance other than caprolactam. Caprolactam is the monomer for nylon 6. Allied previously announced plans to expand its nylon 6 tire yarn production and install facilities for the manufacture of textile yarns.

Cotton Cloth Curtailments

Curtailment of cotton mill operations occurring before exhaustion of existing order backlogs, and steady reduction of distribution inventories in meeting a high retail offtake, are combining to shorten the current period of adjustment in this industry, according to W. Ray Bell, president of the Association of Cotton Textile Merchants of New York. Bell stated in the organization's 29th annual survey that curtailment has withdrawn about 200 million square yards from production in the 1960 third quarter, with the probability of like or greater curtailment in the final quarter. He said this is bound to hasten a solution to the problem of market stability.



CUT SYNTHETICS WITHOUT FUSING

FIG. G-102

Taylor-Stiles "GIANT" Cutters handle most Synthetic, Man-Made and Natural Fibers Easily!

Whether you cut synthetic, man-made or natural fibers, Taylor-Stiles GIANT Cutters can meet *your* specific cutting requirements. These machines are widely used for cutting continuous filament synthetic yarns, glass yarn, thread waste, rags, etc. A complete range of sizes and capacities is available.

The GIANT No. 415 Thread Waste Cutter shown here, for example, cuts 3000 or more pounds of nylon waste an hour, without fusing, in any lengths from 2", 3" 4" up to 24". Changes in length are quickly made by means of vari-speed motor. Other features practically eliminate jamming. WHAT IS YOUR PROBLEM? We'll be glad to make a sample cutting of your material and furnish engineering advise free. Just return the coupon below or phone now for quick action.

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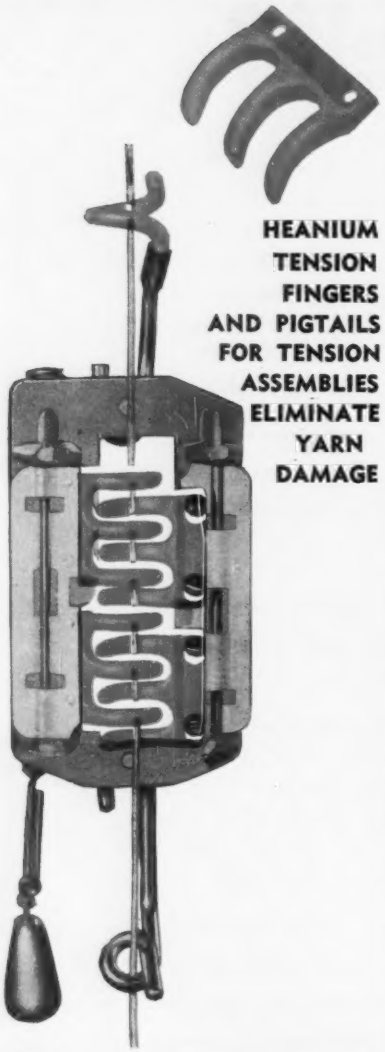

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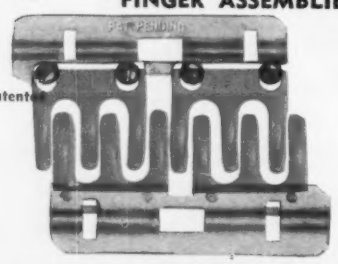

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Textile Outlook Appraised

The textile industry will present a stable appearance over the next 6 to 9 months, according to Fred L. Smyre, Jr., president, Smyre Manufacturing Co. During that time the industry will move laterally, he said, with no pickup expected to take place before late Summer or Fall of next year.

Knitting Show Bookings Rise

American and foreign firms have now reserved 25% more display space for the 1961 Knitting Arts Exhibition, to be held next April, than they did at the previous exhibit in 1959. The 45th biennial knitting exhibition will be held in Atlantic City, N. J., next April 24-28. The exhibition is sponsored jointly by the National Association of Hosiery Manufacturers, the National Knitted Outerwear Association and the Underwear Institute. Robert T. Kenworthy, Inc., 10 East 40 Street, New York City, is supervising the show, which some 13,000 representatives from the U.S., Canada and foreign knitting fields are expected to attend.

Kodel Fiber Expansion

The second phase in the multimillion dollar construction program of production facilities for Eastman's new polyester fiber, Kodel, has been started at Kingsport, Tenn. Plans call for the construction of two new plants—one for the manufacture of terephthalic acid and the other for dimethyl terephthalate. The plants will be large enough to meet Kodel manufacturing requirements of these two chemicals. The new units also will have capacity available to supply dimethyl terephthalate for the production of Eastman's Estar, a polyester resin film base.

Quality Control Course

The 14th annual basic short course in quality control by statistical methods will be presented by the University of Illinois in Urbana, Ill., from January 30 through February 9, 1961. Intensive work will be given in the fields of control charts, acceptance sampling, and related topics. *For further information write Prof. J. A. Henry, University of Illinois, Urbana, Ill.*

Form New Knit Firm

Calvert Knit Corp. has been formed by Harold Fain, Arthur Modne and Jack Heller to manufacture double knit worsteds using the Morat knitting machine system. The new firm has sales headquarters at 450 Seventh Ave., New York City, with manufacturing facilities in Hoboken, N. J. Modne and Heller also are principals in Calvert Textile Corp.

Mark 50th Anniversary

Dykeman, Loeb & Co., Philadelphia, Pa. textile firm, began celebrating its Golden Anniversary on December 1, 1960. A dinner party for the firm's entire staff was held on November 18. David J. Loeb, president, said that "fifty years in the textile business is somewhat of an achievement these days." Loeb said problems besetting the industry include almost constant overproduction, the influx of foreign goods, and the shrinking export market for textiles.

Wool Cloth Duties

"The new schedule of U. S. wool cloth duties announced by the State Department November 9 potentially appears to be more favorable to the U. S. woolen and worsted industry than the rates applied under the Geneva Reservation, particularly on goods with very low foreign values, but only time will reveal its adequacy," according to Edwin Wilkinson, president, National Association of Wool Manufacturers. Wilkinson said the 25% ad valorem duty is eliminated, as special treatment for high price goods. The new rates will become effective January 1, 1960.

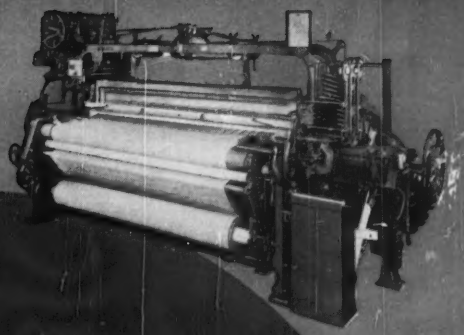
Lowenstein Honored

Leon Lowenstein, executive chairman of the board of M. Lowenstein & Sons, Inc., received the tenth annual award of the Textile Section of the New York Board of Trade at a luncheon at the Hotel Pierre, New York City, on November 10. J. Spencer Love, chairman of Burlington Industries, Inc., and Archie O. Joslin, former president of M. Lowenstein & Sons, were the principal speakers. Garret J. Garretson, II, vice president of Turner Halsey Co., and chairman of the Textile Section, presided, with Frank H. Leslie, vice president of Burlington Industries, acting as toastmaster.

New Irish Textile Plant

The 12th U.S. firm to establish operations in Northern Ireland, Darlington Fabrics Corp., will open a plant in conjunction with Clutson and Kemp Ltd. of Great Britain. The joint firm, which will make elastic fabrics, will go under the name of Clutson and Kemp Ltd., An advance factory is being built by the Northern Ireland Government in the Ministry of Commerce industrial estate at Carnmoney on the outskirts of Belfast. The two companies will pool their technical knowledge and experience. Production is expected to begin early in 1961. Both companies manufacture woven and knitted elastic fabrics.

Stehedco PRODUCTS Are The Heart of EVERY LOOM



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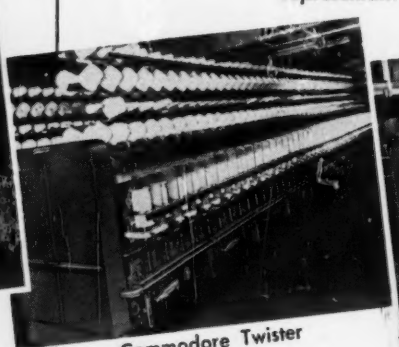
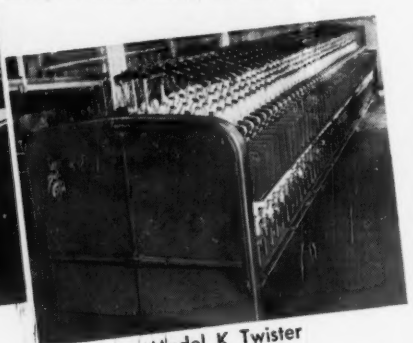


Commodore Twister



Model K Twister

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From Carding through Twisting on either natural or synthetic fibers, there are ultra-modern Whitin machines to handle each process better, faster and more economically than ever—to produce carpet yarns you can be proud of—carpet yarns that truly have the "touch of quality".

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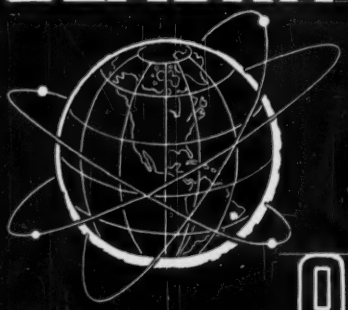
PLAN NEW HORIZONS WITH BEAUNIT'S FORWARD LOOKING FIBERS AND YARNS



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Cuprammonium Rayon Yarn

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BEMBELLA® Two Ends of Parfé Filament Special Textured Yarn
CUPIONI® Douppioni-Type Entangled Slub Filament Yarn
CUPRACOLOR® Solution Dyed Bemberg Filament Yarn
CUPERSIL® Special Textured Dyed Slub Filament Yarn
CUPRINO®* Special Textured Filament and Slub Yarn
CUPRUSSAH®* Thick and Thin Filament Yarn
MULTI-CUPIONI®* Douppioni-Type Multi-Entangled Slub Filament Yarn
PARFÉ® Intermittently Colored Filament Yarn
DREAM SLUB* Torpedo Slubbed Filament Yarn
FLAIKONA® Filament Flake Yarn
STRATA® Thick and Thin Filament Yarn
MULTI-STRATA®* Heavily Slubbed Thick and Thin Filament Yarn
TUSSON* Shantung-Type Dull Luster Slubbed Filament Yarn
NUB-LITE® Short Entangled Filament Slub Yarn

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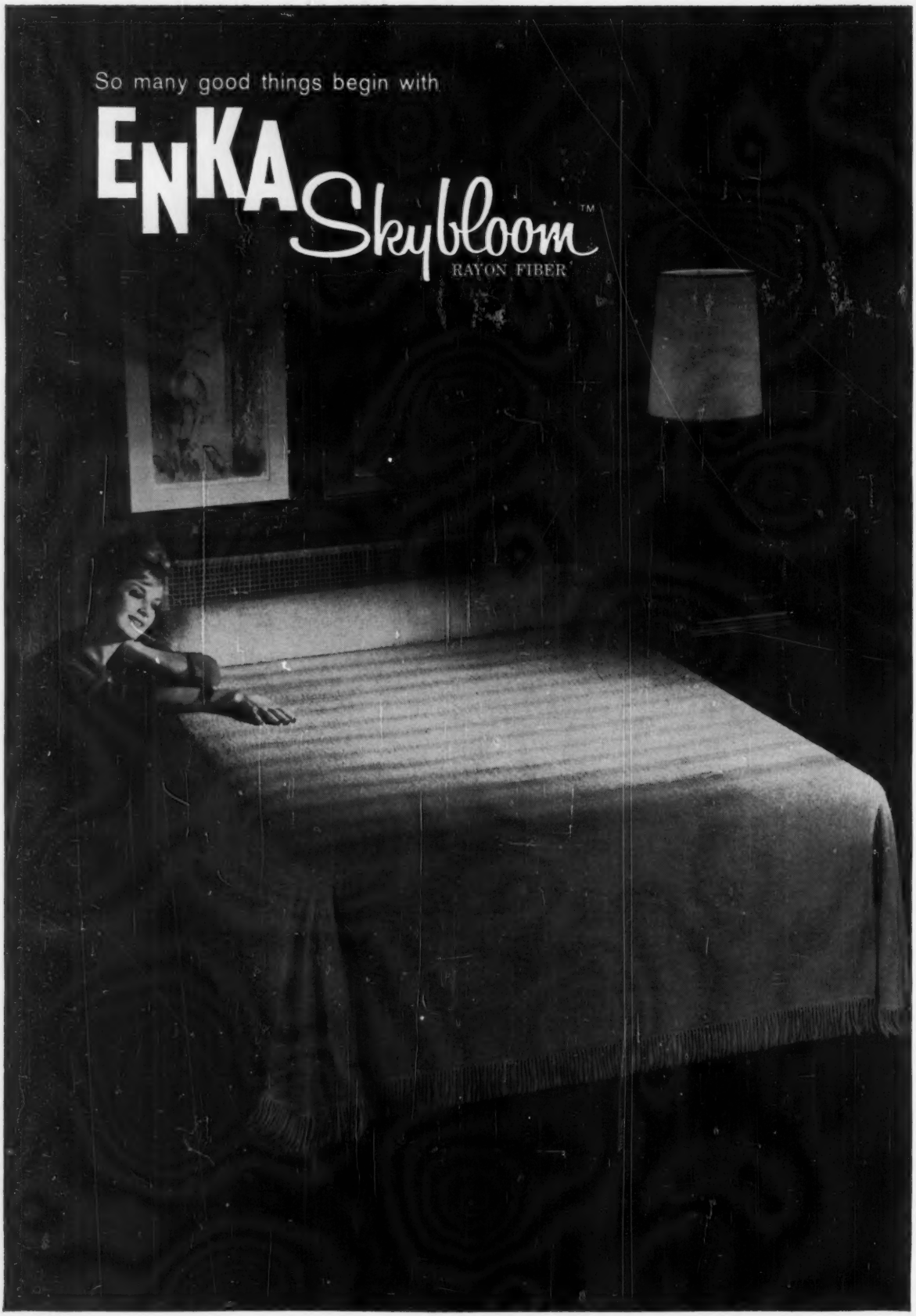
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See the difference... feel the difference

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- **Super-crimp and high-crimp rayon fibers**
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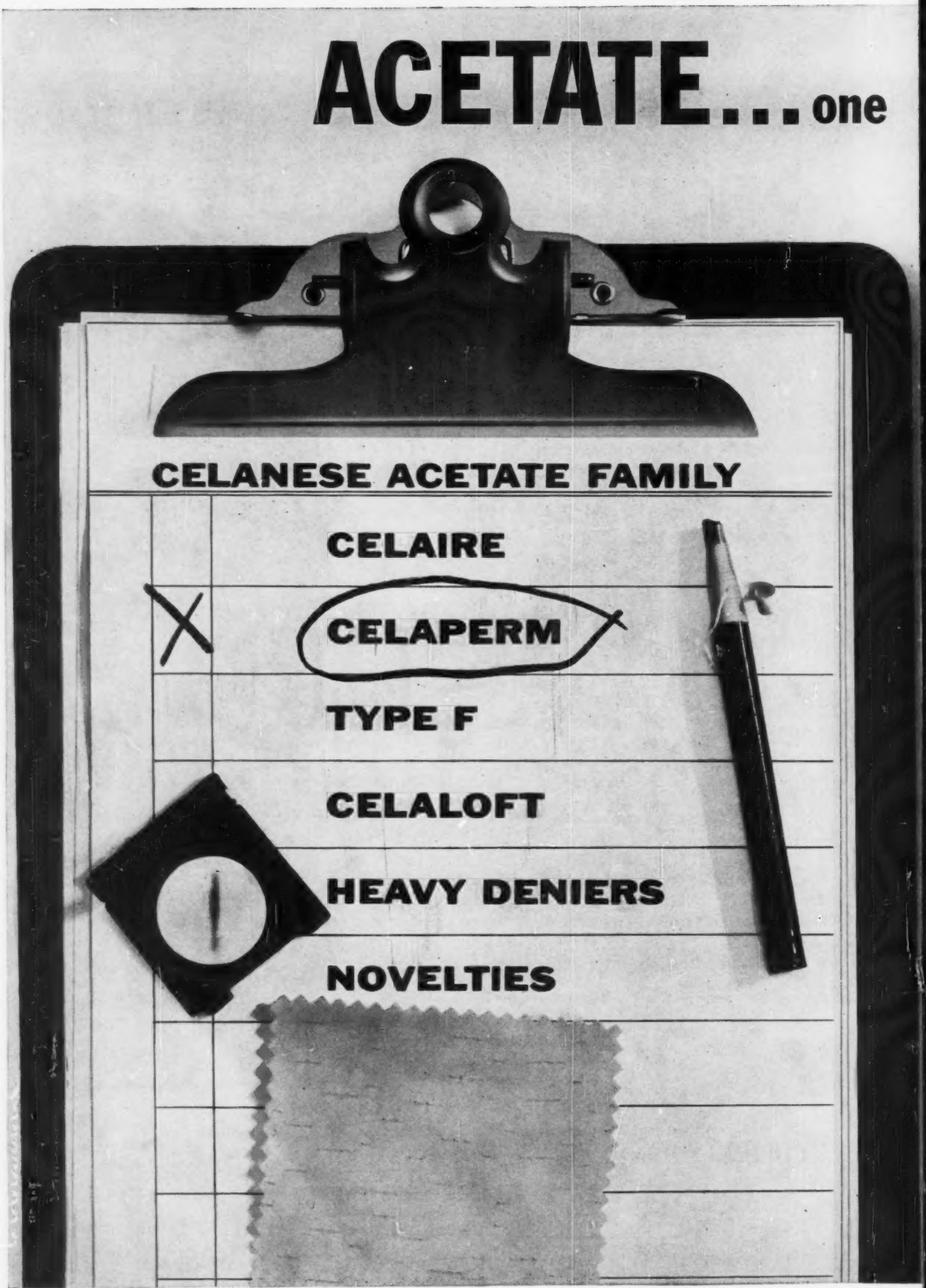
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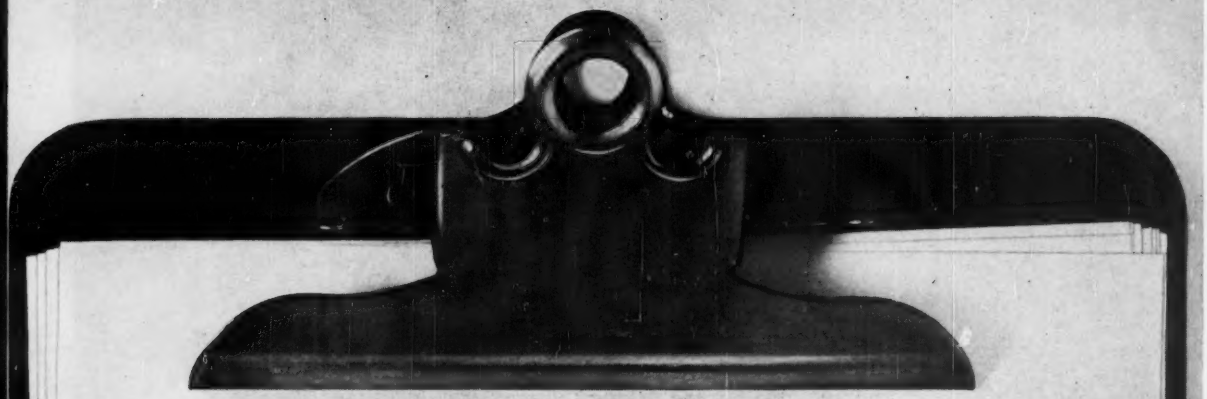

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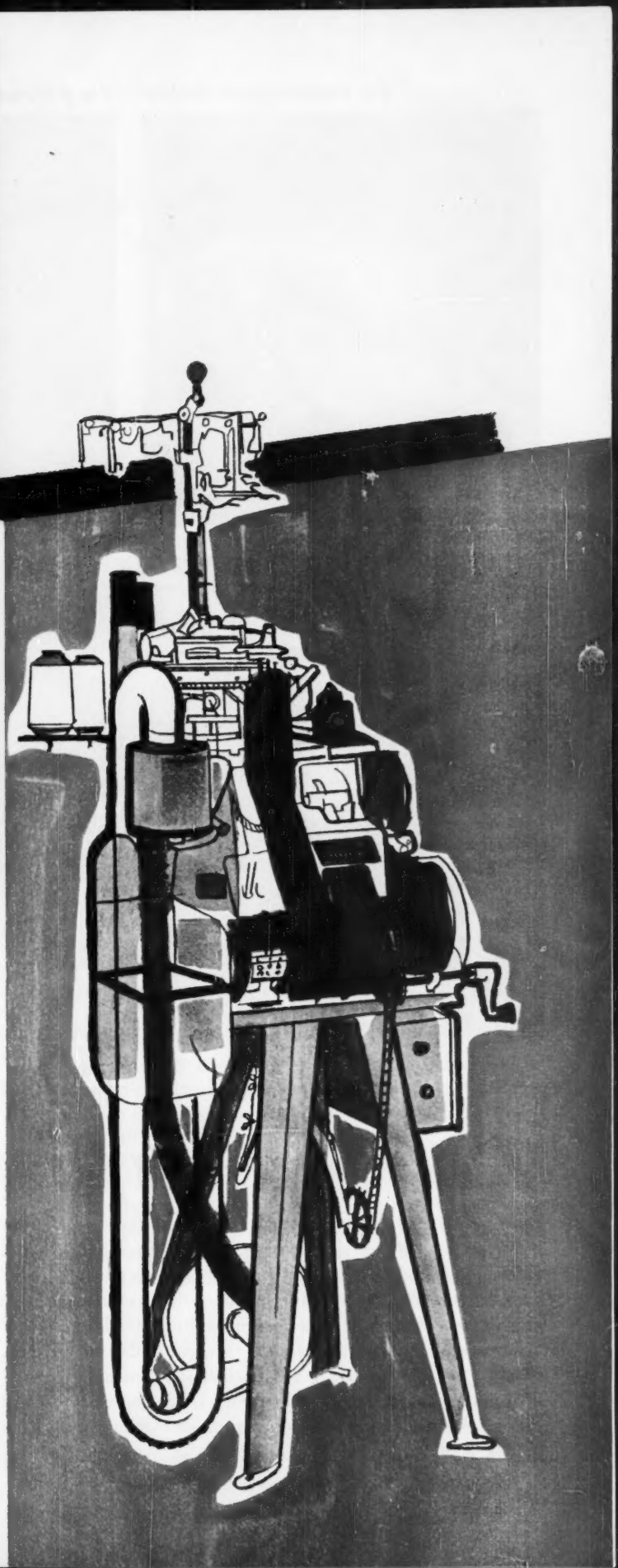

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MODERN TEXTILES
Magazine

Publisher's Viewpoint

Manmade Fibers Generate Optimism

IT WAS OUR PRIVILEGE last month to attend a conference of yarn spinners sponsored by the Du Pont Co. at its headquarters in Wilmington. A note on some of the new Orlon acrylic fiber developments revealed at the conference appears elsewhere in this issue. And next month in our special section devoted to the "Papers of the American Association for Textile Technology," we shall publish an extremely detailed report on Orlon, including the new developments revealed at the Wilmington meeting.

At the conference we had an opportunity to discuss with the many yarn spinners who attended the outlook for manmade fibers as they saw it. Virtually every one of these experienced and sagacious men expressed strong enthusiasm for the vast potential for profitable growth offered the textile industry by the rapidly improving qualities of manmade fibers. Not that these men, seasoned in all the complex tasks of manufacturing yarns, concealed the fact that the manmade fibers, because of their constant changes for the better, do not create problems.

These problems exist, of course; this they freely, often wryly admitted. But they were unanimous in their awareness that manmade fibers present opportunities for progress which made the problems shrink into unimportance. These opportunities, in a nutshell, mean the chance to bring out new and better yarns, yarns with ability to inspire new, more attractive, more serviceable fabrics and apparel.

Tachikawa's Pioneering Work

IT IS A COMMONPLACE of scientific research that some gifted scientists are pioneering trail blazers; they advance so far ahead of their contemporaries that it takes years, often decades, for their slower co-workers to catch up. And too often there is the sadness that when the achievements of these gifted pioneers is given deserved recognition, these leaders are no longer among the living to enjoy the praise that is rightfully theirs.

Such appears to be the case of Dr. Shozo Tachikawa, the distinguished Japanese scientist in the field of fiber research. In 1950, Dr. Tachikawa came to the United States bearing with him the results of his work for improvement of cellulosic fibers. It was our great honor to have him come to us and ask us for help in publishing his work and for introductions to American rayon producers. At that time, as it turned out, Dr. Tachikawa's work did not evoke any real interest among fiber researchists in this country.

Nevertheless, Modern Textiles Magazine, in a series of articles, published Dr. Tachikawa's own report on his work. At that time, little attention was paid to them. But in the decade that has elapsed since these articles appeared, they have made a tremendous impact in the world of textile fiber science. Today it is generally acknowledged that Dr. Tachikawa's efforts contributed greatly to the development of the new high wet modulus rayons that are now being introduced commercially by a number of American and European fiber producers. And as a footnote to the pioneering importance of his work, we must note that hardly a week goes by these days without our receiving from fiber producers here and abroad urgent requests for complete sets of the Tachikawa series we published ten years ago.

A One Day Course for Millmen

ON FEBRUARY 8, at the Hotel Commodore in New York City textile manufacturers and marketers will have a wonderful opportunity to learn from the experts how to make better fabrics and sell them more profitably. The occasion will be the first annual meeting of the American Association for Textile Technology. Unlike so many meetings and conventions, this one will not consist of the reading of a series of prepared papers to an audience more or less awake and interested. Free-wheeling discussion in a series of panel sessions on important aspects of the current textile landscape, livened by questions from the audience, will be the heart of this all-day meeting. We think it will pay you to attend.

A. J. McCullough

TEXTILE NEWS

World Wide

LICENSES TO PRODUCE polypropylene have been granted Japanese firms by Montecatini of Italy. With Montecatini's' approval, Mitsui Chemical Industries and Mitsubishi Petrochemical Co. will produce isotactic polypropylene. Mitsui will build a 10,000-ton plant half of whose output will go into fibers made by Toyo Rayon. Mitsubishi will turn out 7,000 tons yearly, a large part to be processed by Mitsubishi Rayon.

MITSUBISHI PLANS ACRYLONITRILE production. The Japanese government has authorized Mitsubishi and Prospect International to use a Standard Oil of Ohio (Sohio) patent to produce 1.3 million pounds of acrylonitrile a month. It will be processed by Mitsubishi Rayon. Asahi Chemical had been authorized earlier to use the Sohio process.

BARRIERS AGAINST IMPORTS are being sought by European cotton fabric manufacturers. Bernard Herrenschmidt, chairman of the French Cotton Industry Federation, said mill men in the six Common Market countries (France, Germany, Italy, Belgium, Holland and Luxembourg) agreed that only import quotas—and not tariffs which would be inadequate—could prevent an influx of cottons from countries with "unfair competitive practices." He meant the Far East and state-trading nations.

CZECH NYLON TIRE CORD factory is to be built by the new Anglo-German firm, Hans J. Zimmer AG fuer Industrieanlagenbau of Frankfurt. Vickers is the British interest. The new plant will cost some $2.8 million. Vickers-Armstrong will supply the equipment to be used under a Zimmer design.

BRITISH POLYETHYLENE PRICES were cut by Imperial Chemical Industries by 4¢ a pound for domestic customers. The new price is 27¢ a pound. It was ICI's fourth price cut since September, 1958, during which time prices dropped 33%.

TEXTILE RESEARCH INSTITUTE in Bombay was formally opened last month by Indian President Dr. Rajendra Prasad. The institute, sponsored cooperatively by the government and the textile industry, now has 36 company members. Initial capital outlay was 10 million rupees (nearly $2 million), two-thirds of which has so far been used for laboratory buildings, plant and equipment. Annual budget is about $200,000, half from the government and half from the members.

PAKISTAN TO BUY Japanese cotton textile machinery. A group of Japanese firms will ship 300,000 spindles and 3,000 looms before next June 30, Fumihiko Sakai, director of Howa Machinery and head of the Japanese group, said. Further substantial order would be forthcoming.

GERMAN BEMBERG PLANS PERLON production. Thus far, Bemberg, which belongs to the Vereinigte Glanzstoff group of Wuppertal-Elberfeld, has turned out cuprammonium yarns and foils. Production of Perlon filaments is due to start in about 18 months. Vereinigte Glanztoff will handle the sales.

PERLON COAL BAGS have been developed by Walter Schulz of Kettwig, Germany. The bags are said to be lighter than conventional coal bags and impervious to rot and dampness. They have also been tested with high sulfur Bolivian ores which cannot be transported in bulk.

JAPANESE FISH NET FIRM, Momoi Seimo, will establish a sales office in Frankfurt, Germany. In 1959, Japan exported $1.5 million of fish nets to Europe, of which half were shipped by Momoi Seimo. The company believes it can sell $1 million worth in 1961 and $2 million by 1965.

TWO MORE US FIRMS JOIN International Rayon and Synthetic Fibers Committee, headquartered in Paris. The companies are American Viscose Corp. and Hartford Fibres Co. division of Bigelow-Sanford. Courtaulds (Alabama) had already joined, Col. F. T. Davies, committee president, announced.

PHILIPPINES MAY REVIVE maguey fiber industry. Commerce Secretary Manuel Lim has said that the fiber has been used for hemp matting—90% maguey and 10% abaca—by Smith, Bell & Co. (Philippines). This is the first such operation in the Far East and the sixth in the world, Mr. Lim said. Annual output should reach $500,000, based on 24-hour round-the-clock activity.

NORTH IRELAND PLANT OF ICI may be devoted to the manufacture of polypropylene fiber, according to London reports. Imperial Chemical Industries announced it would make Terylene at its new site at Kilroot now being developed. So far, ICI's polypropylene fibers, yarns and monofilaments have been made only at Wilton.

For Marvin and Bernard Rosenberg

CURTAINS ARE ALWAYS GOING UP

In a 33-year drama of growth and product improvement, two brothers have enlarged a tiny curtain factory into Cameo Curtains—merchandising pacesetters in this $400 million branch of textiles

By Jerome Campbell
EDITOR, MODERN TEXTILES MAGAZINE

ONE COLD NIGHT in the winter of 1928, David Rosenberg, his wife, Annie, and their two strapping, serious-minded, young sons sat in the kitchen of their apartment in the Bronx struggling to find a solution for a grave family crisis. David Rosenberg had invested $5,000, nearly all his savings, in a half interest in a small curtain manufacturing business in nearby Yonkers. The money had been slowly earned over many years in a shop for dressmakers' supplies David had conducted on First Avenue in Manhattan's Yorkville district. The decline in the dressmaking trade brought about by the rise of Seventh Avenue's garment manufacturing had gradually killed off David Rosenberg's little business.

Searching for another way to make a living and to give his bright sons the college education they wanted—the elder boy, Marvin, hoped to be a lawyer while the younger, Bernard, dreamed of being an Astronomer—David Rosenberg impulsively had bought the half-interest in the Yonkers curtain factory. In a few days he learned to his deep dismay that he had been fooled and his new business was without visible assets, except a few broken-down sewing machines. These were the painful facts David Rosenberg pondered that cold night sitting in his kitchen with his wife and sons. The big problem that faced them was: what could be done? Should they abandon their $5,000 investment in the curtain factory or scrape together another $5,000 and buy out the unreliable partner? After long discussion, the Rosenbergs decided that they could not afford to let their investment go down the drain. The best way out of their unfortunate dilemma, they concluded, was to buy out the partner. By obtaining full ownership of the business, they reasoned, they would be able to build it up, and in a short time, they optimistically hoped, get back their money.

To provide the management manpower to accomplish this end, the Rosenberg family conference reached another hard decision. Marvin, who had just graduated from City College, decided to forego for a year his entrance into Harvard Law School where he was already enrolled. Bernard, who was in his second year at City College, decided to shift to the night session so that he could work in the curtain factory alongside his father and brother. The postponement of their education plans would only be temporary, the boys told themselves. As soon as the business was on its feet and capable of being sold for the amount of their father's original investment, they would return to school.

As in most human affairs, however, their confident plans did not work out quite the way they hoped. As it so happened, by pitching in and working hard for a year, the Rosenbergs managed to get enough ahead for Marvin to enter Harvard Law School in 1929. He took his degree and was admitted to the bar in 1932. Meanwhile Bernard went on working days in the curtain business, which they named Cameo Curtains, and going to classes at City College in the evenings. In this way it took him six years to earn his bachelor's degree.

As the business improved a little and the Rosenbergs learned more about making curtains, the job of selling the factory's output was taken over by Bernard. Lugging a bulky sample case, he called on stores in Eastern cities, going from place to place by the most economical means—Greyhound bus. He recalls now that he often had to cut short his interviews with store buyers by reminding them that he had to leave at once to catch the bus to the next town.

The arrival of the big depression of the early thirties added to the difficulties of the Rosenbergs, but they struggled along, selling their cotton scrim curtains, edged with percale ruffles, wherever they could. When Marvin completed law school and was a newly fledged lawyer, instead of seeking clients, he too joined Cameo full time and sought customers for curtains instead.

In 1934, Cameo landed its first really big contract —an order from J. C. Penney for 100,000 pairs of cotton curtains at 20 cents a pair. This order, the Rosenberg brothers recall, was a turning point in their efforts to grow. It lifted them a head above the hundreds of small manufacturers who made a bare living cutting and sewing curtains to be sold in small lots at profitless prices.

From that time on, the Rosenbergs moved upward slowly, selling more and more to the big chains and department stores, and bravely improving their cur-

(Continued on Page 28)

Carpets, draperies, upholstery

The big picture in HOME FURNISHING FABRICS 1961

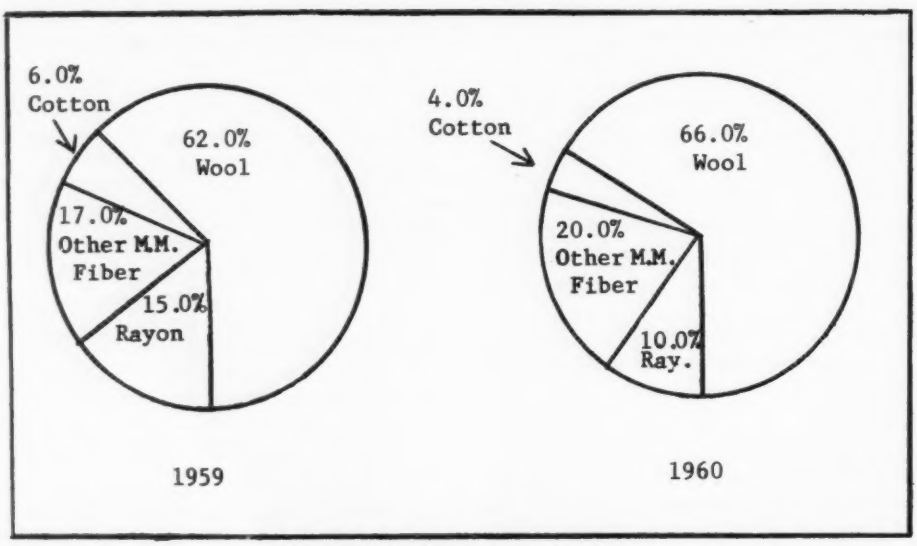
As revealed at the January Market in Chicago, styling is more imaginative, quality generally upgraded, and manmade fibers more relied on than ever before

By the Editors

PRESENTATIONS at this month's Home Furnishings Market in Chicago indicate that the manufacturing and merchandising of textile goods for the American home have become full-fledged fashion operations with all the seasonal changes and rapid obsolescence that have typified the apparel fields. Appropriately the Home Furnishings Market this month is viewing its first musical fashion show. The production of Burlington Industries, it presents products ranging from carpeting and scatter rugs to curtain and drapery fabrics, upholstery fabrics, mattress tickings and pile fabrics for decorative use—all to demonstrate the fashion concept of color coordination in all types of homes with all types of decor. Seven of Burlington's home furnishings divisions are participants in the program: Burlington House Fabrics Co., Sidney Blumenthal & Co., Mooresville Decorative Fabrics Co., Princeton Mills, Goodall Vinyl Fabrics, Charm Tred Mills and Catlin Farish Co.

meeting in October. He expected 1960 broadloom carpet yardage to be 132 million, equal to the industry's second highest annual total reached in 1958 but an 8% decline from 1959's record of 144.5 million square yards. For 1961 he anticipated an increase to 140 million square yards. Dollar volume for 1960, he said, would show up better than yardage, compared to 1959—with only a 7% decline—because of increased sales of better-quality merchandise, particularly of carpets made of wool and higher-cost man-made fibers.

Reynolds also presented a breakdown of fiber usage for the past three years which is shown in the pie chart accompanying this article. He especially noted an increase in consumption of wool and nylon. The resurgence of wool he attributed in part to the Wool Bill, passed by Congress in 1958 and made permanent in 1960, which he said had opened up an additional 200-million pounds. Regarding nylon, he reported



Estimated Fiber Consumption for Broadloom

Continuing the trend of recent years, carpeting, once perhaps the most conservative of home furnishings items, is being produced in greater and greater variety, and thereby the industry keeps expanding its dollar and unit volume. An estimate of 1960 carpet industry performance and predictions for 1961 was made by William A. Reynolds, economist of the American Carpet Institute, at the Institute's annual

a "boom" recorded by continuous filament nylon from an estimated five to six million pounds for 1959, the first year of the fiber's use in carpet, to a rate of 15 million pounds in 1960 which is half of the year's nylon total of 30 million. Part of this represents true growth," he explained, "and part the replacement of nylon staple."

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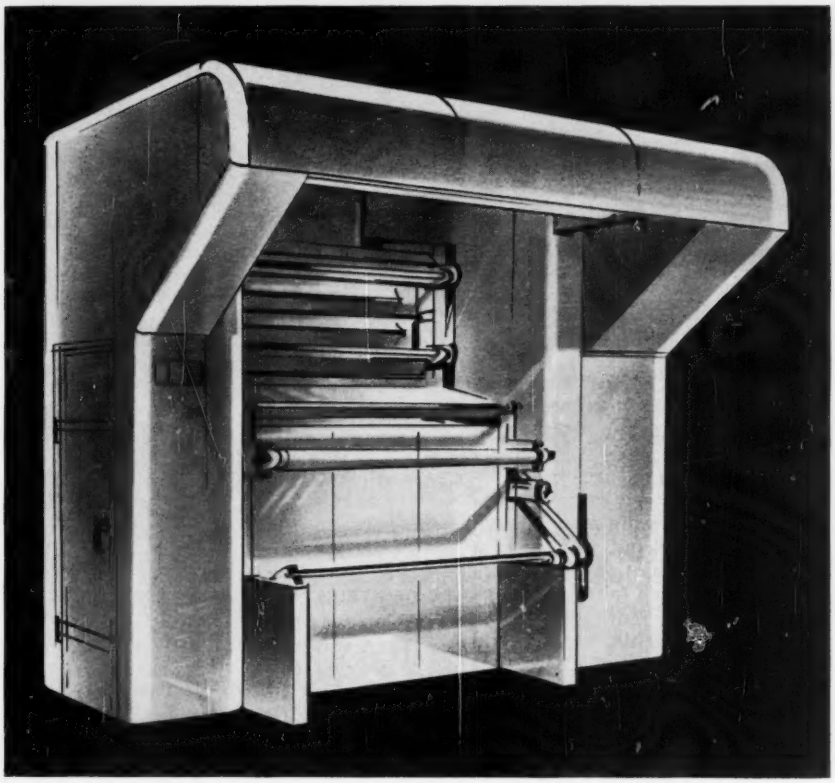
DYEING and FINISHING SECTION



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Finishing blended fiber fabrics

AATCC Convention Report (concl.)

Fabric Development of Synthetic Blends from a Practical Dyer's Viewpoint

James E. Greer,
Greensboro Finishing Co.,
Burlington Industries, Inc.

DESIGNING, dyeing-finishing and merchandizing fabrics of man-made fibers is really a new business. It is only about 15 years old. It is a new business grafted onto the older structures and ideas of the textile industry. Making a fabric of synthetic fibers and merchandizing it is quite different from that of the regular all-cotton or all-wool business.

Fabric development of synthetic mixtures is a complicated affair which, if not understood by mill management, will result in your plant losing money, even to the point of going bankrupt; and put you out of a job. It is easy to oversimplify the situation and underestimate the problems that stem from fabric development of synthetic blends.

The end use, fastness requirements, styling and market situation, determine the type of fibers that can be used in making a fabric. Many mistakes have been made in the past. The designer must educate himself by close contact with his Dyer on what combination of fibers is practical to dye.

Next, it is important that the spinner and weaver be considered in designing a fabric. It costs more to spin and weave a blend or a mixture of fibers than it does any single fiber yarn. Automotive upholstery fabrics is an example of complicated, expensive manufacturing of a synthetic fabric. Adding Orlon into your woolens to produce ligher weight fabrics will add to your costs and complicate your whole operation.

Third point, is the Dyer—the Dyehouse itself. To be successful, the Dyehouse must have skill, knowledge and a staff with the experience of handling synthetics. They must have the equipment. Finally, the most essential point is that the Plant know their costs. The Plant that is already in synthetics or that is contemplating getting into synthetics, will go bankrupt—go broke, if you please, if they don't have a realistic cost system so they can price their services at a profit to themselves. The Plant must have a staff that figures cost. The cost of every operation, everything that is done to the cloth must be added up realistically. You must include the cost of the fabric development, the cost of the sampling, the Lab personnel needed to produce the samples, the cost of redyeing—which is inevitable. Sometimes these add up to a surprisingly high figure.

Somehow or other, your Dyer and Lab can hunt around and finally learn how to dye some particular blend, and eventually get the goods out. However, if you have designed an impractical fabric and your New York Office has taken the business at an unrealistic price that you hear described so often as "one that pays part of my overhead", then you are in trouble. Your Plant will eventually become bankrupt and all of your designing skill, your dyeing knowledge and your beautiful fabric, will go for naught.

It is paradoxical that the synthetics fabric industry which has grown by 2000 percent in the last 10 years, an industry that is bringing the best of chemistry and giving the public a better garment at a lower price than 10 years ago, is itself having a difficult time in surviving this revolution.

New Fibers from Du Pont

Milton M. Christie,
The Du Pont Co.

NEW FIBERS with unique characteristics provide an ever expanding base for the development of fabrics with new style, aesthetics and performance. Since nylon was first introduced by Du Pont in 1939, primary emphasis has been given to establishing and improving the performance and aesthetic properties of our fibers. This has been true not only for nylon but also for Orlon acrylic, Dacron polyester, and the other fibers. In addition to a program for continued improvement of our existing product lines, Du Pont has, for a number of years, devoted major research efforts to developing a more comprehensive family of fibers to meet the needs of the textile industry. New attention has been focused on the development of fibers which offer the fabric designer an opportunity to develop a broader range of styled fabrics.

This paper reviews a number of these new fibers with special emphasis on their outstanding features as well as some of their physical properties which can be translated into desirable and unique fabric characteristics. These fibers (all Du Pont trademarked products) are: Orlon Type 72; Orlon Sayelle; Antron Nylon; Dacron Type 62; Lycra Spandex Fiber.

Recent Developments in the Dyeing of Verel Modacrylic Fiber

R. J. Fortune and V. G. Paul,
Tennessee Eastman Co.

ONE OF THE HAZARDS of processing many of the man-made fibers is their sensitivity to stretch and distortion at the high temperatures commonly used in the application of dyes. Verel modacrylic fiber was numbered in this group until recent months when it was learned that, because of unique properties of the fiber and newly developed techniques, dyes could be applied at temperatures lower than those at which distortion primarily occurs. Recent developments permit the application of disperse, neutral-premetallized,

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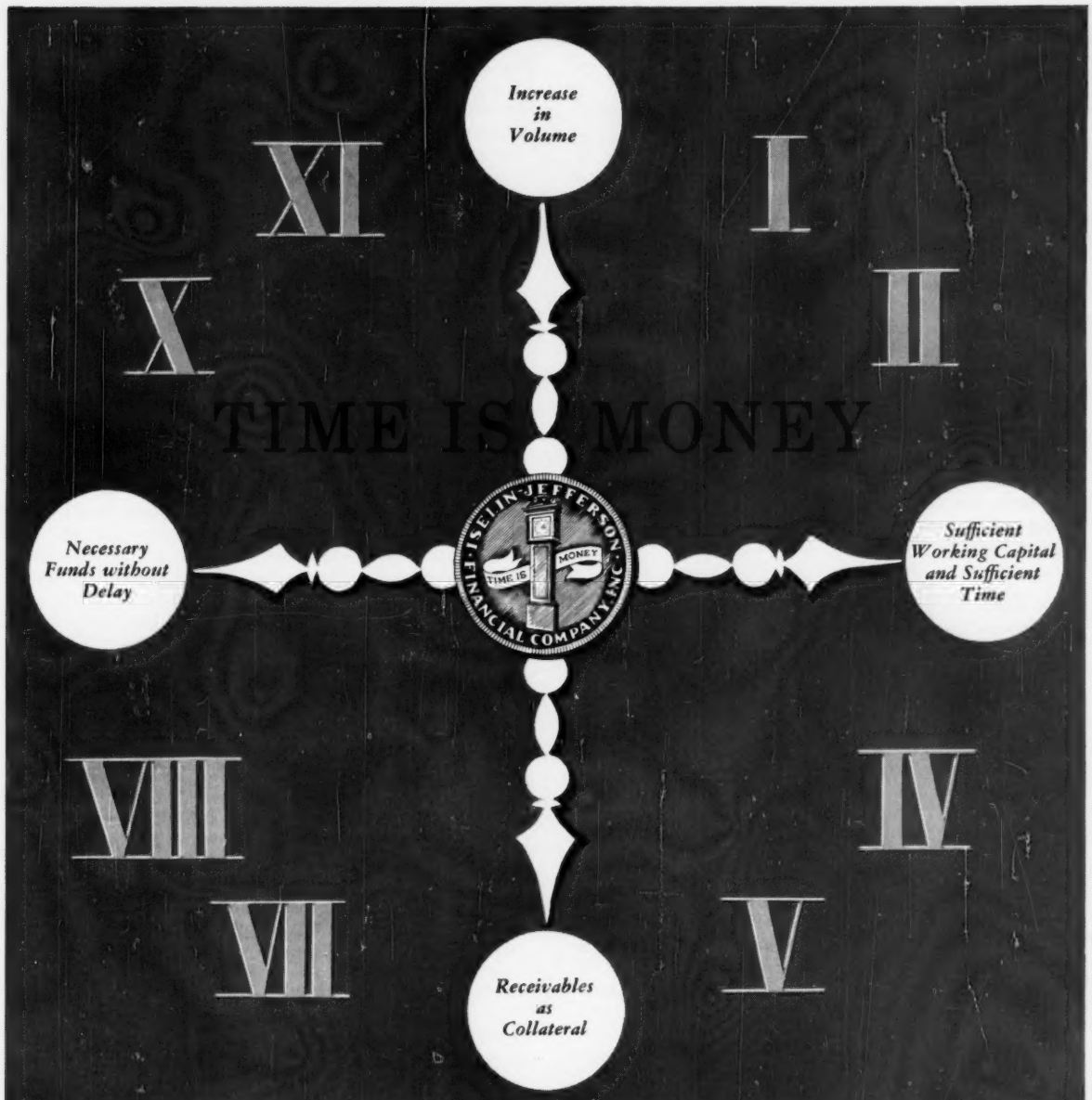

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AATCC Papers

(Continued from Page 24)

and basic or cationic dyes at 160°F. Dyeings at 160°F. yield equivalent fastness properties to those made at 212°F.

Using this new technique in rawstock dyeing, loose and fluffy dyed fiber is obtained. This affords easier rinsing, opening, drying, and processing.

•By lowering the dyeing temperature, new areas of fabric development are opened permitting many new styling advances. Probably one of the most important areas developed by this low temperature dyeing technique is in the piece dyeing of tufted or woven floor coverings. Pile distortion has been a major obstacle in the piece dyeing of carpeting and one which has prevented any widespread application for the newer fibers. By dyeing at 160°F., distortion and directional lay of the pile is virtually eliminated. A complete range of shades with acceptable color fastness may be produced. Verel fiber can be dyed equally well in packages, skeins, and fabrics by use of this new technique which results in greater retention of original fiber properties.

New Color Measuring Instruments for Use by the Textile Industry

Frank J. Rizzo and Alvin O. Ramsley,
Quartermaster Research & Engineering Command,
United States Army

THE QUARTERMASTER CORPS and the textile industry have long wanted and needed color measuring instruments for their individual and mutual purposes. The Quartermaster Corps needs such devices to more adequately control the quality of the materials that clothe and shield the soldier and his equipment to the specific levels essential for the stringent end use requirements; the textile industry requires instrumentation to stabilize and control each step of the manufacturing process, to reduce or eliminate human error, to establish quality control levels along objective lines and to reduce cost. Both groups require instrumentation so that understandings are facilitated and disagreements are eliminated.

The available instrumentation, some quite sophisticated, has not, however, been sufficiently adequate to the task both groups wish it to perform. Many instruments have been developed and marketed, some with rather ingenious features and many have found specific applications in the industry with consequent benefit to the control of quality. Universal acceptance of measuring instruments for routine shade control in the many possible areas of textile operations has not been possible for a number of reasons, a substantial percentage of which are instrument-related, but some of which are related to inadequacy of the theories upon which the design and use of equipment have been based.

The study reported analyzes the factors involved and shows how corrective steps in design and in concepts of use have been applied to newly developed instrumentation under Quartermaster sponsorship which it is believed goes a long way towards achieving the desired goal of general applicability to textile problems.

A Tristimulus Colorimeter and a Rapid Scanning Spectrophotometer, capable of direct readings of color and color differences are described and their performances defined in comparison with standard visual assessment. General specifications of design characteristics are given and are believed to be the basis for the accomplishment of improved instrumentation meeting all of the essential requirements. Problems possibly solvable in the textile industry by the developed instruments are defined; also the possible uses of this equipment in the inspection as well as development of military textiles are recorded.

The Importance of Odor Control in Textile Processing

Breckinridge K. Tremaine,
Rhodia, Inc.

ODORS from bleaching, dyeing, printing and wool scouring operations in textile plants may be controlled readily now. Rhodia now has some 25 odor control chemicals and compounds especially designed for textile operations.

The job of overcoming odors from the various amines, protein decomposition, phenolics, waste chlorine, formaldehyde, sulfonated hydrocarbons and many other processing chemicals is not always easy, since control compounds must be designed to withstand corrosive chemicals and high stack temperatures—and at the same time have the right vapor pressure characteristics. Nevertheless, Rhodia has developed compounds which have been used successfully in exhaust fumes of 800°F.—while relieving eye and nose irritation in plant personnel and abating malodors.

Odor control is no hit-or-miss affair. The aim of good odor control is to produce as often as possible a clean fresh odor to replace a malodor. It does not always hold true that only a pleasant-smelling material will serve to correct the odor of an unpleasant material. Often very foul odors, such as those represented by the butyrates, can be used to offset an odor nuisance. The cost of treating waste liquors in ponds and lagoons varies with different plants, ranging anywhere from 30 to 70 cents per day for each 100,000 gallons of wastes.

Treatment of malodors from textile processing operations is only one phase of an odor-abatement program. He said that Rhodia also produces chemicals for treating fabrics in resin finishing baths and also for after-treatment.

Dyeing with Vinyl-Sulfone Reactive Dyes

H. Luttringhaus,
Carbic-Hoechst Corp.

THE INTERESTING CHEMISTRY of the vinylsulfone fiber reactive dyes has been elucidated to such an extent that we can talk about it intelligently without having a complete explanation for reactions which take place during the dyeing with these dyestuffs. Because of the formation of the Remazol ether linkage these dyes show different characteristics which will be explained. The methods of application for cellulosic fibers have been improved in many fields through research and practical experience. Methods and results acceptable to our industry because of their simplicity and gratifying performance will be discussed and shown. Based on practical experience, samples of ac-

(Continued on Page 63)

8,929,962 *for* 1

A single 3 denier Turbo-Orlon sweater will contain almost nine million individual fibers. Each individual fiber contributes to the superior loft and hand of the sweater . . . when it's made of Turbo-Orlon processed by the exclusive Perlok System. Developed by J. L. Lohrke, this system improves synthetic tow by special heat stretching, breaking and relaxing processes . . . assures the ideal High Bulk yarn for bulky, interlock, jersey and full-fashion knitted garments. Whatever sweater characteristics you require—if it's made from Turbo it's made from the number 1 sweater yarn.

LOHRKE / TURBO

TURBO-ORLON

Contact a licensed Turbo mill . . . over 50 in United States and Canada

J. L. LOHRKE COMPANY / 3 PENN CENTER PLAZA • PHILADELPHIA 2, PA.

Cameo Curtains

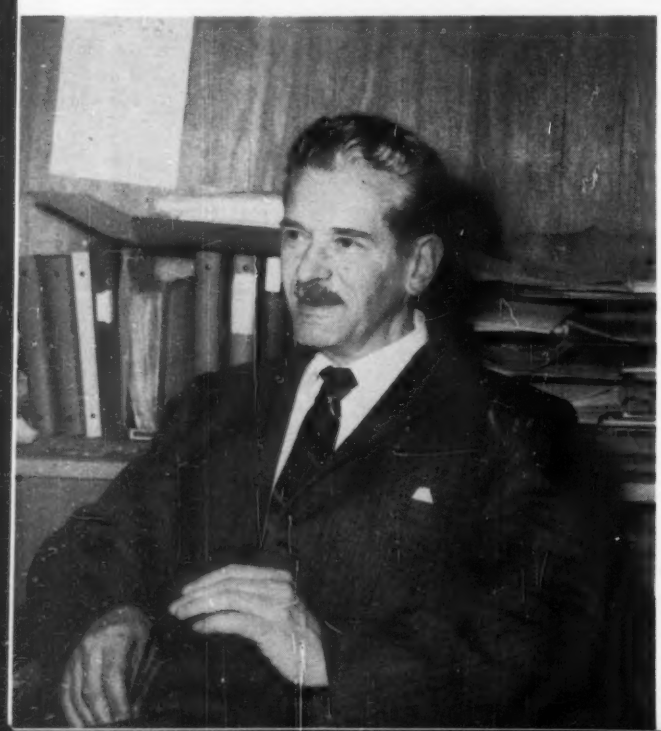
(Continued from Page 21)

tains. This they did by putting in the extra touches of workmanship and fuller yardage of cloth that made their products stand out and thus command a better price.

By 1939, they had moved Cameo's plant three times, on each occasion to larger quarters with more workers and more and better sewing equipment. The third move was into the former plant of the Waring hat factory near Getty Square in Yonkers where they had 37,000 square feet of floor space. When the United States entered the war in 1941, Cameo was one of the few curtain manufacturers willing to take on war orders and equipped with the machinery and skill needed to produce the items the military procurement people wanted from curtain manufacturers. For a start Cameo made marquisette insect bars, head nets, surgical gowns. Later in the war, the firm moved ahead to the more difficult work of producing fragmentation bomb parachutes.

In making these precisely cut and sewn military items, the sewing operation was critical. Cameo did this work so well that its plant was used as a training school for other manufacturers called upon to do military work. As a result of the firm's willingness to do war work, the Cameo plant was greatly enlarged at a time when curtains had been declared a nonessential item and other manufacturers were forced to curtail.

Meanwhile, the firm was able to keep up some production of curtains for the civilian market. Because Cameo was known for its integrity and its scrupulous abstention from undercover deals to get cloth for curtains, the mills that were its prewar suppliers saw to it that Cameo got its fair share of the limited quantities of cotton marquisettes available for curtains. As a result of its willingness to divert itself into war work without too much anxiety about maintaining its position as a curtain manufacturer and because of the excellence of its military products Cameo received three Army-Navy "E" awards before the war ended. His firm was the only curtain manufacturer so honored, Marvin Rosenberg points out today with understandable pride.



Nathan Levinson
As Cameo's general production manager he supervises its big plant in New Bedford, Mass.

When its military work ended, Cameo was ready to go ahead into the postwar boom market for curtains enriched with an unexpected and rich dividend from its war work. This was a greatly broadened knowledge of better techniques for manufacturing curtains—a heightened skill in cutting and sewing on a low-cost basis, plus increased know-how in operating a big sewing plant according to the best techniques of modern factory management adapted to this specialized trade.

With Cameo's return to full-scale civilian operation, Marvin and Bernard Rosenberg took stock of their position and made plans for the future. It dawned on them at long last that they were in the curtain business for keeps. With some reluctance, but with the hard-headed realism of good businessmen, both brothers came to the conclusion that they were deeply immeshed in the curtain business, and that they would stay there. Bernard gave up his teen-age dream of becoming an astronomer; Marvin decided that he was far too deeply involved in the curtain business to even dream of starting out to practice law. For them it was to be the curtain business for keeps.

Growth Market for Curtains

Putting their heads together they plotted for Cameo a new course of growth and steady improvement in the quality of its products. Their planning, moving to fruition in the past 15 years, has brought Cameo to a commanding position among the four or five companies that are the volume leaders in the manufacture of curtains and draperies today.

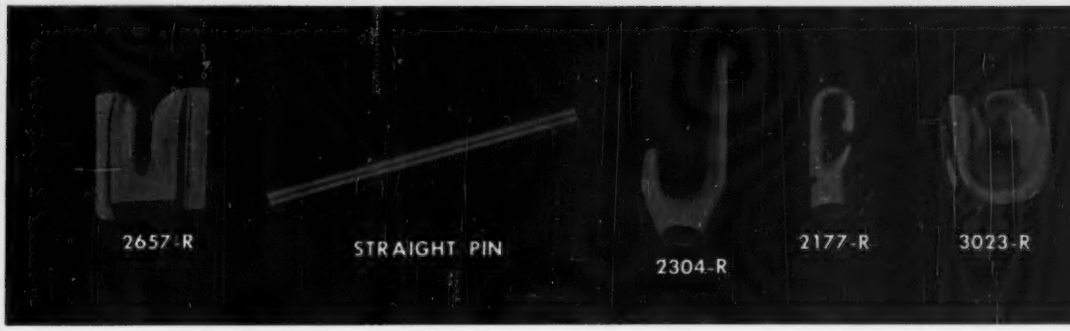
By and large, the postwar period was one of golden opportunities for curtain and drapery producers like Cameo equipped with the skill, experience and capital to take advantage of the boom in home building, and the sharp rise in American standards of living that have combined to provide an expanding demand for window draperies. Marvin and Bernard Rosenberg put into effect a policy of creating, on one hand, a brand image for Cameo products, and on the other, a line of curtain and draperies of steadily upgraded quality. It was their determination to back up their Cameo brand name with superior merchandise, both in the sound bread-and-butter qualities of serviceability and the sales-stimulating qualities of pace-setting styling and intriguing novelty.

The tone of the new era for Cameo was set largely by its patented "Shir-Back" marquisette curtain, an invention of Bernard Rosenberg. Cameo, incidentally, starting in 1940, was one of the first to use nylon in marquisettes, shifting to Dacron when it became available in 1950. Equipped with a built-in tape that need only be pulled to draw up its panels into a luxurious mass of draped marquisette, the curtain thus does away with the conventional ties.

With the Shir-Back curtain spearheading Cameo's sales effort, the Rosenbergs attacked with vigor the job of establishing their brand name in the minds of the women who were eager to buy curtains for the multiplying windows of the millions of new homes in postwar United States. Cameo's promotional aim, Bernard Rosenberg says, was to "sell consumers through the stores rather than just sell to the stores".

(Continued on Page 38)

MACHINERY and EQUIPMENT SECTION



"Rutex" TITANIA THREAD GUIDES by MITCHELL-BISSELL

Not Just a Wear-Resistant Surface, but the Same Hard, Dense Material All the Way Through!

Mitchell-Bissell "Rutex" Thread Guides are made from a special homogeneous Titania compound that provides a perpetually hard, smooth wearing surface no matter how deeply the thread may wear into the guide. There is no outer surface to wear through and put an early end to the guide's usefulness. Introduced by Mitchell-Bissell at the recent Southern Textile Exposition, these quality guides were enthusiastically received.

Mitchell-Bissell "Rutex" Thread Guides provide a three-way saving . . . lower first cost, longer service, less downtime. That extremely hard, smooth contact surface never changes because it is characteristic of **all** the material from which the entire guide is made. **Wear-resistance never ends!** You can use these new guides with complete confidence in their quality, efficiency and economy.

"Rutex" Titania Guides are available in many of our standard Porcelain thread guide patterns. For prices, please give Porcelain pattern number, or send sketch or sample of guide you are now using.

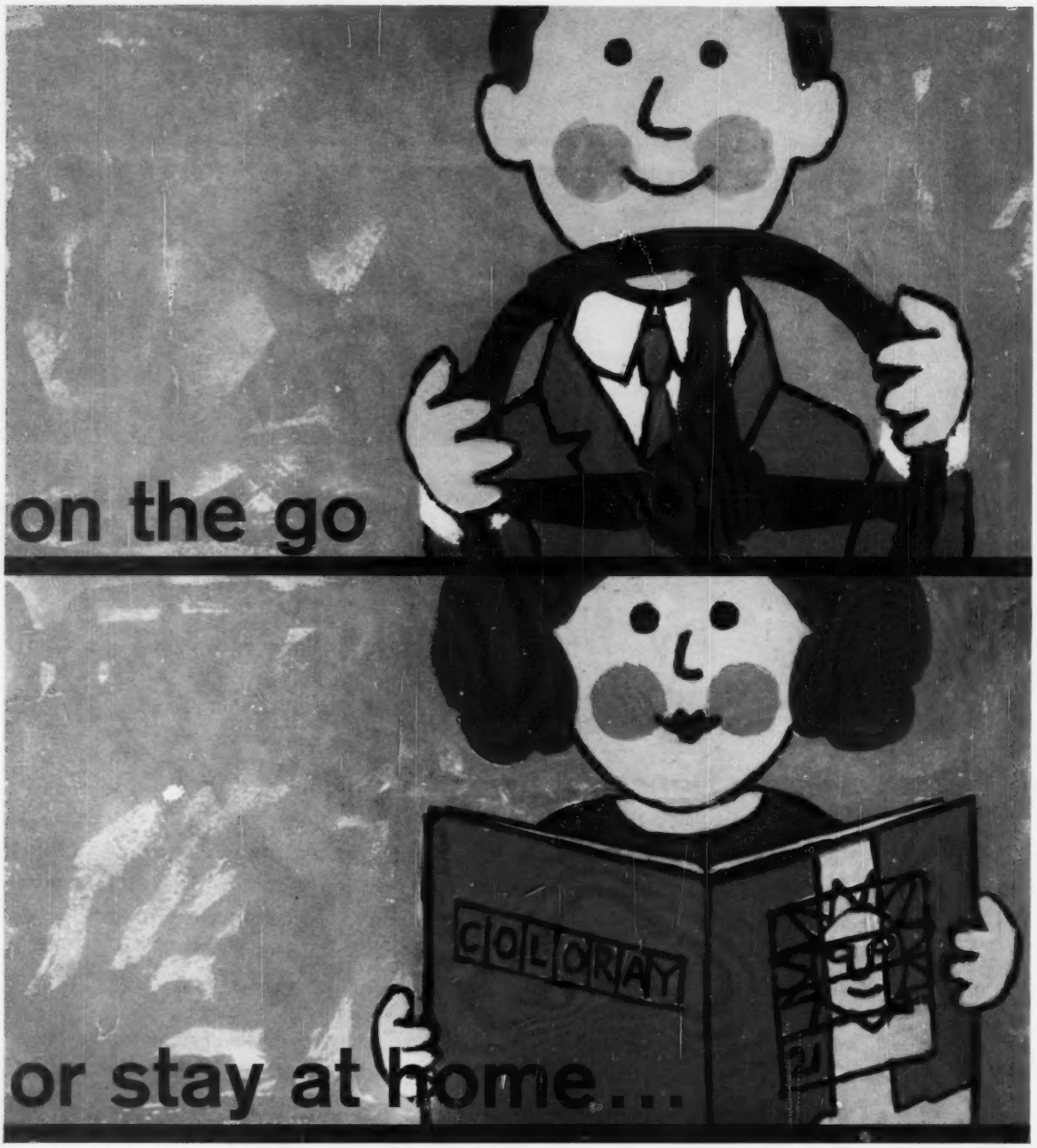
EST. 1882

MITCHELL-BISSELL CO.

TRENTON, NEW JERSEY

Southern Representative: HOLT ASSOCIATES, INC., *Greensboro, N. C.*

The Only Manufacturer Offering a Complete Line of All Types of Ceramic and Wire Guides for the Textile Industry.



COURTAULDS

COLORAY®

(THE SUPERFAST FIBER)
BRIGHTENS YOUR
WAY OF LIFE!

Everyone gets great pleasure out of living in colorful settings and wearing colorful clothing. Color stimulates. Color soothes. Color attracts. And color in textiles is loveliest and most lasting when it comes from Coloray, Courtaulds' solution-dyed rayon fiber.

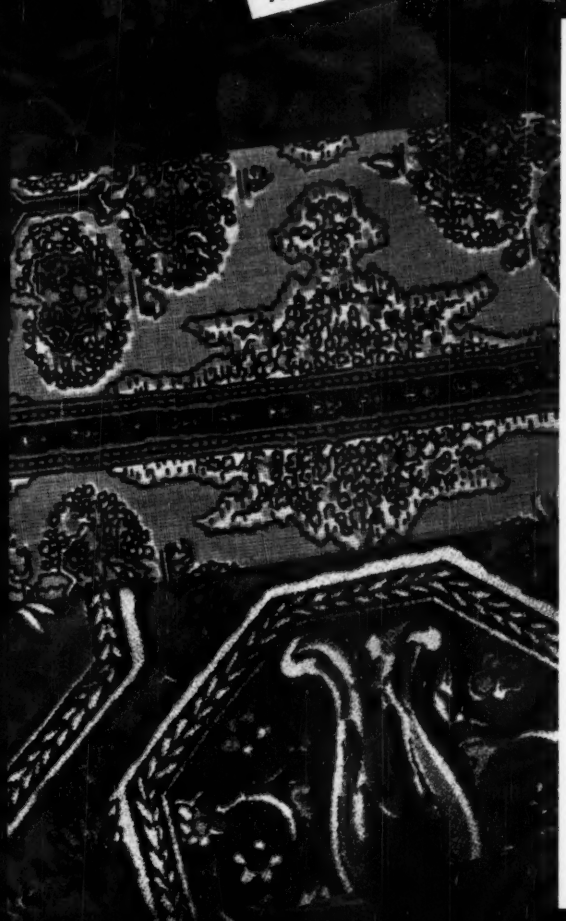
Coloray is ideal for the upholstery of automobiles where it proves its supreme fastness to blazing sun, and rugged wear. Coloray enhances draperies and makes sure they never fade or streak in the sunniest window. Coloray enlivens and insures the whole family's clothing...shirts and slacks and suits and dresses and socks...and fabrics for sewing as well.

By all means, brighten your business with wonderful fabrics made colorful and colorfast by Courtaulds COLORAY!

COURTAULDS
COLORAY.
Solution-dyed rayon fiber with Captive Color..."Can't Escape!"

Proctor makes another friend in the textile industry

Mr. C. W. Schwartz, IV, Proctor Sales Engineer and Mr. Robert J. Verlik, Plant Manager, Stafford Printers, Inc.



Only three months after installing a Proctor Loop Ager, Stafford Printers, Inc., of Stafford Springs, Conn., tells a remarkable success story—one that is being repeated again and again in the textile industry today.

Formerly, all goods were processed through two roller vat-type agers, but output lagged badly behind print machine capacity. With its new Proctor Loop Ager, however, Stafford increased its discharge print production by 85%! Also, thanks to Proctor, aging speed was increased from 40-50 yards a minute to 100-120 yards a minute. As a result, direct labor savings amounted to 60% per yard.

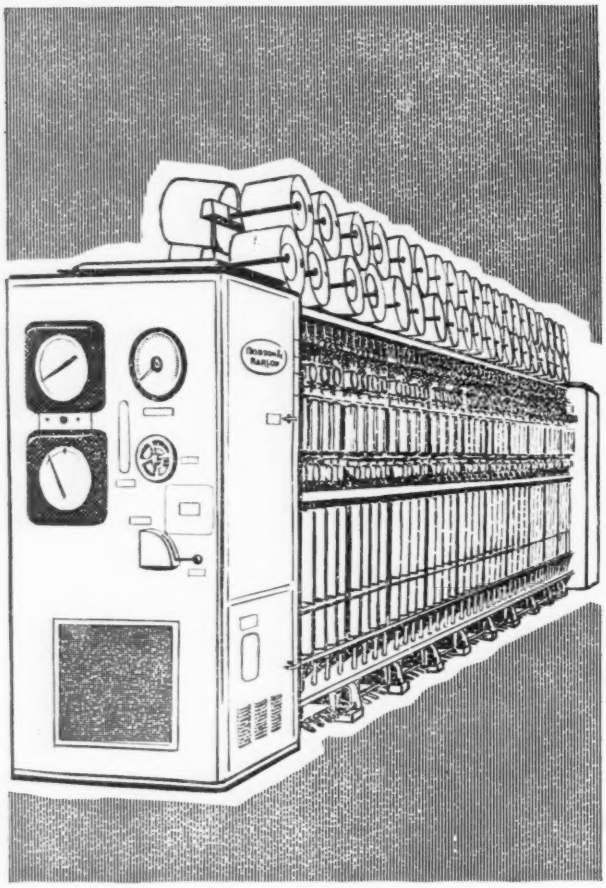
But these statistics don't tell the whole story. Stafford has also realized savings in dye and chemicals. Steam consumption was reduced by 50% per yard; better color yield and improved fixation have resulted.

Is there a weak link in your production chain? If so, take the first step towards making it stronger by contacting your Proctor representative today, or write directly to PROCTOR & SCHWARTZ, INC.

When you modernize with Proctor, you'll be years ahead for years and years.

Proctor

PROCTOR & SCHWARTZ, Inc. 7th Street & Tabor Road, Philadelphia 20, Pa.



The HDT.1 heavy denier drawtwister

meets the trade's most exacting requirements

UNIQUE FEATURES—

Designed specifically for the hot stretching of the heavier, high tenacity, synthetic yarns.

Up to 9 lb. net weight of yarn on a 14 in. lift bobbin.

Denier range up to 2,000.

Delivery speeds up to 1,250 ft./min.

Hydraulically driven and controlled building motion.

Complete with all electrical equipment, including automatic, hot plate temperature scanning.

For further details apply to:

DOBSON & BARLOW MACHINERY SALES LTD.

BRADLEY FOLD WORKS, BOLTON, ENGLAND

A step forward in yarn carrier improvement

SONOCO'S NEW RESEARCH CENTER

A NEW RESEARCH LABORATORIES BUILDING was dedicated by Sonoco Products Co. in November in Hartsville, S.C. in memory of Dr. James Edward Mills, Sonoco's first chief chemist and research director. Dr. Mills, who died in 1950, was a recognized authority on paper chemistry. He was the holder of the Herty Medal, presented for outstanding contributions to chemistry in the Southeast and also a 50 year member of the American Chemical Society.

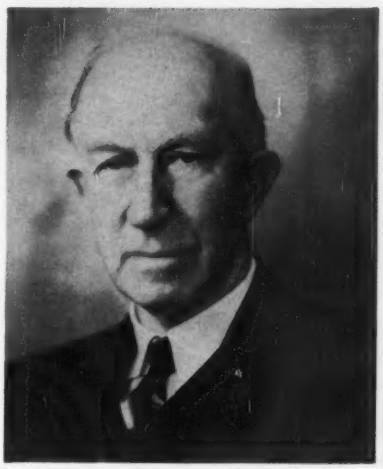
He was graduated and obtained his Master of Arts degree from Davidson College. He did further graduate work at the University of North Carolina for his Doctor of Philosophy degree and also received an honorary Doctor of Science degree from the University of South Carolina.

In 1934, Mills joined Sonoco Products Co. where he did extensive work on papers, lacquers, thinners, synthetic resins, adhesives for plant consumption and other Sonoco firsts. Mills was the chairman of the Division of Chemistry and Chemical Technology of the National Research Council. He was past president of the South Carolina Academy of Science, a former councilor of the South Carolina section of the American Chemical Society and a member of the board of trustees and the executive committee of Coker College. He was a member of the Electro-Chemical Society, the American Institute of Chemists and the New York Academy of Sciences and a fellow of the American Association for the Advancement of Science.

This new research center built at a cost of over a quarter million dollars will house up-to-date laboratories. The new building will have three times as much space as present facilities. It was designed so a second floor or additional wings can be added at a minimum expense.

Included in the new building are 10 laboratories, each with a variety of equipment to give Sonoco the facilities for more extensive experimentation and research. New features include a paper pilot plant and a textile constant temperature control room.

Charles W. Coker, executive vice president, dedicated the new structure. A memorial plaque was unveiled by Mrs. J. E. Mills, the widow of Dr. Mills.



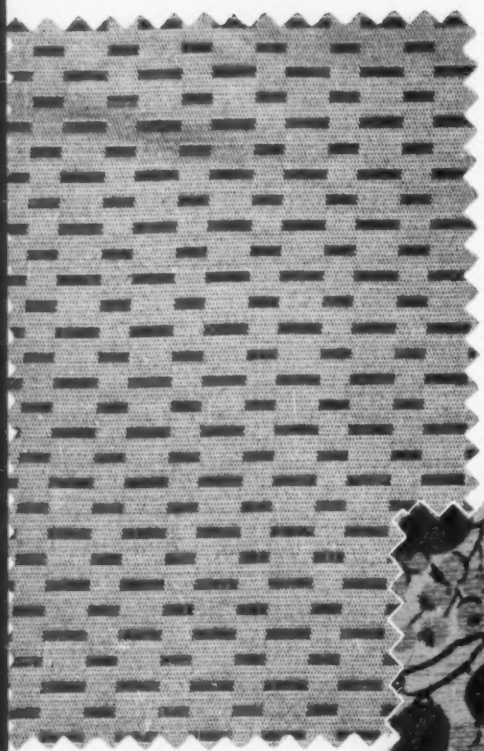
The late James Edward Mills

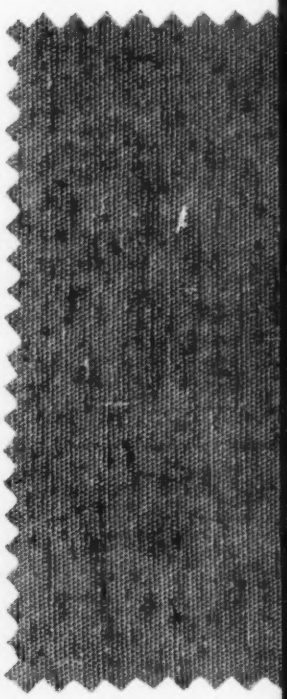
Sonoco Products Co., established 61 years ago, is one of the largest manufacturers of textile carriers in the industry. It has branches in Massachusetts, Ohio, Texas, Connecticut, New Jersey, Pennsylvania, Indiana, Georgia, Virginia and California. Subsidiary companies are located in Ontario and Quebec, Canada and in Mexico; associate companies are in Australia and England.

In November also, Sonoco at its headquarters in Hartsville was host to a meeting of 29 members and associate members of the Textile Packaging Committee. The group, composed of representatives from a number of textile mills, toured Sonoco's facilities. Following the tour, R. K. Johnston, Jr., committee chairman, conducted a short business meeting. C. H. Campbell, Sonoco's vice president in charge of sales, spoke briefly on the history of the company. Descriptions of the various products manufactured were given by J. K. Taylor, assistant director of sales. C. H. Campbell, Jr., resident sales manager, Atlanta branch, discussed new and better packaging methods used by Sonoco. On display was a complete line of products along with new designs. Various packaging problems solved by Sonoco's engineers were also represented.

The new research center of Sonoco Products Co. in Hartsville, S. C., will house ten laboratories devoted to paper products improvement including carriers for textile products

Variety's
your challenge.....





Tomorrow's markets will belong to the mills that have prepared for them today. UNIFIL® Loom Winders are giving modern mills a market-oriented advantage.

UNIFIL Loom Winders enable weave rooms to use a wide variety of filling yarns; natural and man-made; spun, filament and textured. The single shuttle weave room can switch filling yarns from one count to another, from one fabric to another as quickly as fashion trends change — *and at no extra cost.*

While insuring against market demand variances, UNIFIL Loom Winders drastically reduce inventory and production planning, work scheduling and employee training. These savings and the inherent operating economies of UNIFIL are the major factors in purchasing decisions.

UNIFIL's unmatched versatility meets today's needs and tomorrow's markets. It allows mills to wind from any filling supply *economically.* Quills are wound and shuttles loaded, empty quills stripped and returned for rewinding — *all automatically at the loom!*

Investigate UNIFIL for greater versatility and economy. Learn the reasons why leading textile mills consistently reorder UNIFIL Loom Winders. Call your nearest Leesona Sales Engineer — in Boston, Philadelphia, Charlotte, Atlanta or Los Angeles. Or write LEESONA CORPORATION, P. O. Box 1605, Providence 1, Rhode Island. Keep pace with your market with UNIFIL.

..... meet it with *Versatility!*

Some of the many modern mills that are meeting today's challenges with **UNIFIL** *Loom Winders*

ABDON TEXTILES, INC.
ABNEY MILLS
AMEROTRON COMPANY
BEMIS BRO. BAG CO.
BERKSHIRE HATHAWAY, INC.
BERNSON SILK MILLS
BLOOMSBURG MILLS, INC.
BRUCK MILLS, LTD.
BURLINGTON INDUSTRIES, INC.
CADILLAC TEXTILES, INC.
CANNON MILLS CO.
CHRYSLER MILLS, INC.
CLINTON SILK MILL
CONE MILLS CORP.
DOVER MILL group
ERLANGER MILLS, INC.
GERRISH-MILLIKEN MILL
GREENWOOD MILLS
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FRANK IX & SONS
JAUNTY FABRICS CORP.
JUDSON MILLS
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MARION MFG. CO.
PANSY WEAVING MILLS
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REEVES BROTHERS
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TALLASSEE MILLS
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WELDON MILLS, INC.
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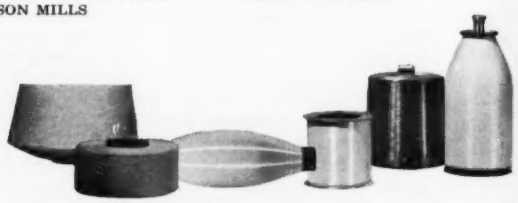

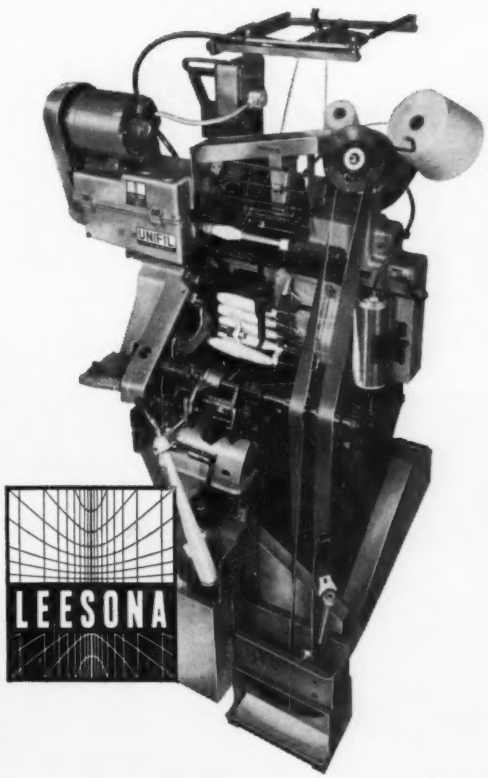

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INTRODUCING-

A NEW FINISH FOR

BLENDS

DEVELOPED BY

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AMERICA'S LEADING FINISHER OF
FINE SYNTHETIC FABRICS SINCE 1936

OUR 25TH YEAR

"Kenyon
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NEW FABRICS

NEW YARNS

Vycron-Blend Sleepwear

Fantasy Lingerie Corp. has been marketing for the Christmas gift market a new line of sleepwear items in a woven blend of Vycron cotton and nylon. Fantasy reported initial buyer reaction to the new Vycron blend has been encouraging. Vycron is a new polyester fiber developed by Beaunit Mills from Vitel resin produced by The Goodyear Tire & Rubber Co. Vycron fabrics can be machine-dried or drip-dried with little or no pressing, and can be dyed in a full color range in shades highly resistant to sun and laundry fading.

New Coat Front Felt

A new line of chemically bonded coat front felt materials has been adapted by the Palm Beach Co. for its wash-and-wear and regular garments. Available in natural white, the new materials are 40½-inches wide and put up on 100-yard rolls for easy handling. It is developed in three styles, so as to meet most requirements. Manufactured by Wellington Sears, the felt material can be purchased in cotton and rayon or in cotton and wool. All styles are bonded with a special formulated latex binder to give a soft felt-like hand and impart durability to drycleaning when fabrics are stitched into the coat front assemblies.

Thermal-Knit Panties

The thermal stitch, a fabric construction already proven successful in the men's underwear field, has been introduced for the first time this Fall in women's knit underwear by Fort Schuyler Knitting Mills. The firm is using a blend of 75% cotton and 25% Dynel modacrylic fiber in the thermal stitch for its classic women's panties ending above the knee. The thermal stitch is constructed to form a pocket which holds in, toward the body, the normal air which becomes heated by the body. The new women's thermal panties are made of a fabric lighter in weight than that used for men's underwear.

Fiberglas Auto Ceiling

A one-piece, snap-in automobile ceiling of molded Fiberglas is incorporated in the 1961 model autos being turned out by American Motors, according to Owens-Corning Fiberglas Corp. Each ceiling uses better than two lineal yards of Fiberglas fabric and 27 square feet of insulation. These two basics are bonded together and compressed to a half-inch thickness.

The one-piece, snap-in ceiling not only reduces installation time but has these additional features: cuts road noises appreciably (by 30% says American Motors); adds a half-inch more headroom over conventional ceilings; provides thermal insulation, and is available in eight colors to complement the auto interior and exterior colors.

New Sherpa Pile Fabric

Collins & Aikman and American Cyanamid Co. have jointly announced that a new pile fabric with a "shearling" texture, Sherpa, is now in production. The fabric is made of 100% Creslan acrylic fiber pile. Fiber and construction combine to give Sherpa weightless warmth, while Creslan makes it possible to dye the fabric in a wide range of colors. It can be used either as a pile liner or for outerwear.

Collins & Aikman also has introduced Sherpa-Touche, another new fabric of 100% Creslan pile and also applicable to outerwear garments—from sweater to coats—and as liners.

THE TEXTILE DISTRIBUTORS INSTITUTE, INC.

NEWS AND COMMENT

"Harsh" Contract Clauses Discussed

An analysis of contract clauses deemed to be "harsh" on sellers of finished goods is contained in a recent bulletin sent to members by the Textile Distributors Institute. In the belief that the bulletin may be of interest to textile distributors not members of the Institute, its contents have been made public by the Institute. The text of the bulletin follows:

You will recall that under Bulletin 2154 issued January 23, 1959, we pointed out to you some clauses contained in purchase orders which customers of our members were presenting to our members for signature.

Another purchase order from a well-known purchaser of finished piece goods has come to our attention. This purchase order is, to say the least, extremely favorable to the buyer and extremely harsh on the distributor. It provides, among other things, that there is to be no grace period for deliveries by the seller; that deliveries are not complete until actually received and accepted by the buyer; that the seller recognizes that the goods are intended for sale of wearing apparel and that any defect therein may cause the buyer special damages including loss of profits.

""The purchase order also provides that the seller will indemnify the buyer against any claims involving trade mark, patent or copyright infringement and will defend any litigation commenced against the buyer with respect to these goods. In addition, there is no arbitration clause in the contract meaning that any dispute under this purchase order would have to be litigated in court.

As we have advised you previously several times, we believe that the TDI recommended form of finished goods contract contains time-tested terms of sale which are fair both to the buyer and the seller. It would be well to restate to you the opinion we set forth in our Bulletin 2154 on this question of accepting purchase orders from buyers:

"Our counsel, Weil, Gotshal & Manges, advises that if a distributor accepts from a customer a signed purchase order of the type described above, and ships against such purchase order without first obtaining the signature of the Buyer on the distributor's finished goods contract, or at least mailing to the Buyer the Seller's finished goods contract with the added sentence quoted below, then the terms of the Buyer's purchase order would prevail and the distributor would be bound by all of such terms, no matter how harsh or unrealistic they may seem.

"May we remind you that the finished goods contract provides: 'This order embodying the terms on the face and on the reverse side hereof is hereby acknowledged to be correct by Buyer but it shall become a contract either when signed and delivered by Buyer to Seller, and acecpted in writing by Seller or when Buyer or his agent has accepted delivery of the whole or any part of the goods herein described.'

"The safest procedure is for the Seller to see to it that the Buyer signs the Seller's finished goods contract before the Seller ships any goods. We point out again the importance of your reading all the provisions of any purchase order which you receive; if all the terms of such purchase order are not completely acceptable to you, then be certain of your position by making sure that the customer signs your finished goods contract before you ship any goods.

"In order to make the terms of your finished goods contract crystal clear to your customers, it is recommended that when reordering from the printer your form of finished goods contract, you add the following sentence at the end of the material on the face page of the contract (directly above the signatures):

> It supersedes Buyer's manifold or purchase order and no modification of it shall be effective unless in writing signed by the parties."

Luncheon Honors Schwartz

Samuel Schwartz, president of Cadillac Textiles Inc., and an active member and officer of the Textile Distributors Institute, was honored last month by a testimonial luncheon at the Hotel Astor, New York. At the luncheon, which was given by the Rayon and Allied Industries Division of the Federation of Jewish Philanthropies, both he and Mrs. Schwartz were cited for their years of devotion to humanitarian causes, and their many gifts for philanthropic purposes, as well as more specifically for their generous support of the work of the Federation. More than 300 persons attended the luncheon. Louis Kates, French Fabrics Corp., served as master of ceremonies. He is chairman of the Rayon Division's current fund raising campaign.

Sylvan Gotshal Honored

Sylvan Gotshal, legal counsel of the Textile Distributors Institute, was honored last month at a testimonial dinner for his services and humanitarian effort on behalf of Israel. The dinner, held at the Hotel Pierre, New York, had as its guest speaker Binyamin Eliav, Consul General of Israel in the city. The dinner was sponsored by the Lawyers Division, State of Israel Bonds.

LEAVY GETS AWARD—Retiring TDI president, Nat Leavy (below left) receives a gold watch and plaque from president-elect Irving Roaman (center) and A. J. Wullschleger at TDI annual banquet

Cameo Curtains

(Continued from Page 28)

It should be pointed out here that the idea of establishing a brand name in the minds of consumers was unheard of in the curtain trade. Although the curtain and drapery business is one that runs to $400 million yearly in retail sales, the industry is largely made up of small producers. Marvin Rosenberg estimates that some five or six firms account for $150 million of current yearly volume. The balance of the industry's sales are confined to hundreds of smaller firms, many of them no more than family operations with two or three employees.

Starting in 1947,when television was in its infancy, Cameo used this potent medium to advertise its Shir-Back marquisettes. Always adventurous and imaginative in advertising, Bernard Rosenberg hit upon the idea of trying out TV blurbs for Shir-Back curtains in the Philadelphia area. His spots showed the curtains on windows with a woman demonstrating how easily they could be hung and instantly draped by means of the patented pulling tape. Names of stores in Philadelphia and Trenton stocking the curtains were mentioned. In a matter of hours, women poured into these stores asking for Cameo Shir-Backs. Encouraged by this success in one market, Bernard plunged ahead with the program, extending it first to ten, then to forty cities.

He supervised the production of the filmed spot advertisements himself; and he recalls today with amazement how little they cost in those early days of television commercials. He actually produced the films for as little as $40 apiece and placed them on the air, in that first Philadelphia venture, for only $20 for a one minute spot on WFIL-TV.

Since this beginning in consumer advertising, Cameo has branched out into print media on a big scale, running its advertisements in women's and shelter magazines. Skyrocketing TV costs have long ago made it necessary for Cameo to give up this expensive form of advertising. But Bernard Rosenberg

SEWING A FINE SEAM—This worker at Cameo's big New Bedford factory adds finishing touches to a marquisette curtain

is still wholeheartedly in favor of advertising and more advertising. "We have tried every medium," he says, "except skywriting." Currently, Cameo's advertising expenditures are running at $500,000 a year.

Today Cameo is widely regarded in the curtain and drapery field as the most energetically progressive and quality-minded of the larger manufacturers of ready-made curtains and draperies. Its volume breaks down roughly into 40% Dacron marquisette sheers and 60% opaque ready-made draperies in a wide range of fabrics and styles. In draperies, Cameo has tried to follow a program of giving homemakers custom-made quality in ready-made drapes. "We are producing for American homemakers," production manager Nathan Levinson says, "ready-made draperies that are the equivalent of custom-made draperies at one third the price".

To keep its production abreast of the success of its sales efforts, Cameo in 1954 moved its entire manufacturing operation to New Bedford, closing down its Yonkers plant. At New Bedford the company took over the old Whitman Mill stretching for blocks along the salty shores of the Acushnet River. In this rugged old structure, Cameo has built up one of the most efficient curtain and drapery plants in the world. Occupying 180,000 square feet of floor space, the setup, with 600 workers and a clerical force of 80, takes in fabric at one end and turns out at the other finished curtains and draperies boxed, bagged and ready for shipment.

Last year in a new burst of merchandising daring, Cameo began its "operations results" program in which it guarantees to ship finished curtains in any amount (no order too small) to stores within 48 hours provided the stores participating in the program will

(Continued on Page 61)

TWO TO FOLD—These workers are folding and packing finished marquisette curtains

PAPERS OF THE
AMERICAN ASSOCIATION FOR
TEXTILE TECHNOLOGY INC.®

AATT

An examination of

FABRIC PERFORMANCE STANDARDS

Five viewpoints on an important trend

Introduction
by Cameron A. Baker

PROMINENT among the objectives of the American Association for Textile Technology, as stated in our Constitution, is the provision "to consider the establishment and promulgation of standards." We have not been remiss in the fulfillment of this objective although many of us have worked more as individuals than as association representatives. The papers to be presented under the title of "Performance Standards in the Textile Industry" will serve to acquaint our members with the latest developments in this field. Behind these standards are many years of accumulative experience, not only in the setting of limiting values but in test methods development which, of necessity, preceded the standards. The yardsticks were needed before the measurements could be applied.

Our membership, as technologists, have contributed in a major way to the technical progress of this work. Again, as technologists, we are the people in our own organizations who are usually called upon to apply the standards. In these ways we live up to our stated objective. As an association we can best serve our purposes by bringing together a group such as this to discuss the subject.

The need for standards, or guides, arises in many quarters of our industry. Stemming from consumer representative, the retailer and the institutional purchaser, we go back one step to the garment manufacturer who is faced with selecting fabrics and finishes from a myriad of combinations to fit an end-use category. Fabric manufacturers face the same responsibility in supplying fabrics to a specific trade. Carried one step further we reach the yarn producer who, in today's merchandising picture not only maintains his own quality control facility but often extends it throughout the sequence of manufacturing operations to assure the fact that the ultimate consumer associates his name with good products. The textile industry is fairly unique in this producer interest in finished products.

The textile industry is unique too, in the manner in which we approach standards. Our spokesman for the American Standards Association can best describe how other industries specify—let us say—raw materials, thickness, shape and size; and come up with a standard for a pot or pan. Not so, in the textile industry. We have such a variety of raw materials, so many ways of combining these raw materials, and put so much emphasis on style and price, that the ordinary type of specification writing just does not apply.

Baker is director of research and development of Better Fabrics Testing Bureau, Inc. of New York, N.Y. Prior to joining the Bureau, he was manager of the textile research department of the United States Testing Company of Hoboken, N.J. Baker is a textile engineering graduate of the New Bedford Institute of Technology.

Cameron A. Baker

Papers presented at the November 2, 1960 meeting of the American Association for Textile Technology at New York, N. Y.

Except in the case of the military and a few industrial supplies, the fabric designer is given a free hand to pick and combine his raw materials in the development of a product. However, he does need his experience and a guidepost to an expected quality level in order to engineer a suitable product. This is the point where performance standards enter the picture. The performance standard serves as the guidepost, enabling the textile engineer and finisher to make a judicious selection of materials to fit a consumer requirement for an end-use.

The most obvious source of information for the foundation of an end-use performance standard is the consumer. The ultimate consumer, however, proves to be a poor source when wear factors must be translated in technical terms with which he is not familiar. Expectancy levels, in terms of satisfactory or unsatisfactory service life can be obtained from the consumer. The retailer and the institutional buyer are in a position to classify products in this fashion. Test data obtained on these service rated items yields the technical information required to build a standard.

In other words, the performance standards our panelists will discuss are experience records in tabular form and the need for such standards, the mechanics of drafting a standard and the use to which the finished works are being put, are the subjects of our discussion.

The retailer's viewpoint

By William Burston

THE AVERAGE RETAILER has a pragmatic approach to performance standards. If he's being hurt by their absence, he wants them. If he isn't hurt, he doesn't want them until he is hurt. In a word, there is nothing gained by preventive standards, because you wouldn't know where to begin and where you would end. Necessity is the mother of standards.

A decade ago we were plagued by customer complaints about the stand-up-ability of rayons and acetates. These cost us time and money. They also disturbed the good will we prize so much between customer and store. We therefore sponsored ASA L22 Standards for rayon and acetate. When subsequently the proliferation of new fibers and blends began causing similar complaints, we sponsored the enlargement of L22 to include all textiles.

If this were the USSR we might have managed to get some commissar to issue a ukase and make L22 mandatory. But we're the U.S., and we mistrust the mandatory. L22 was and remains voluntary. And yet L22 has exerted and will exert an influence for its broad and broader adoption, without the knout of mandatory compliance that comes with a ukase.

American standards are like Hawthorne's story of the Great Stone Face. Just because that face in the mountains was there—unspeaking—it exerted an influence for good. Because L22 exists, by the mere fact of existence, it's an influence for good, and since we're *not* granite and since we *can* speak, we influence as much as we can those we meet and do business with. L22 is one group of standards and there are thousands of standards. And the thousands work their influence with slow acceleration throughout the years.

I was at Macy's when Jesse Isidor Straus originated the Macy Bureau of Standards. I was Straus's secretary then. If I were still with Macy's, I'd outrank in terms of seniority our good friend, Eph Freedman. I was one of the few to welcome him the day he came to Macy's and we've been friends all these years. I mention this episode not because I'm approaching the age of anecdotage. I want to testify to what one bureau devoted to establishing standards for one store did to an entire industry. I testify from personal experience as well as from the knowledge one gets by word of mouth as a member of such an organization.

Some years after Eph Freedman came to Macy's I was the buyer of the drug department. Let me say here that the buyer—if I was typical—does not want standards. They stand in his way to greater volume and profit. Freedman will remember my coming to him with a beautiful-looking package. It was a bright blue and on it was the silhouette of a gorgeously designed woman. The item was a weight reducer. You reduced by merely pouring a handful into the bath and it worked while you bathed. It would sell for one dollar. The item would be touted by full page ads in every paper in New York. And we'd have a two-weeks' exclusive!

By the rules laid down by Straus—prompted of course by Eph Freedman—every such item had first to be submitted to the Bureau of Standards to be

Burston is head of the merchandising division of the National Retail Merchants Association, made up of some 11,500 department, specialty and variety stores in the United States. He came to his present post after a long career in department store and supermarket retailing. While with Food Fair in Philadelphia he was the first in the East to set up a drug and cosmetics department in a supermarket. Burston is a graduate of the College of the City of New York.

William Burston

sure that the claims for it were correct. While the salesmanager breathed down my neck for an answer and I in turn pressured Freedman for his answer—I, of course, had given *my* answer!—Freedman made his tests. He called me to his office a day or so later and said, "I can't pass this for Macy's. We'll be selling 5¢ worth of perfumed bicarbonate of soda for a dollar. Bicarb in the bath doesn't reduce. That's cheating the public, and my job is to see that our public isn't cheated if we can help it."

You will want to know that I of course went over Freedman's head. Straus ruled that his decision was final unless we could prove that he was wrong. I had to say No to the salesmanager.

The next three weeks were hell. Every night I toted up the girls' "want slips". We lost volume by the grosses! Our girls were of course prompted to tell customers why Macy's wouldn't carry the item. We were told a dozen times a day to mind our own business—just give the customer what she wants. I estimated that the first week—and don't think I didn't get the figure right to Straus—we lost $10,000, and the second week—when the mail and phone orders began to snow in—$20,000. And I was bleeding for another $20,000 the third week—while my competitors were mining gold—when Uncle Sam stepped in with almost precisely the same judgment that Freedman made. The story made the first page in the newspapers. The item died instantly, of course.

In subsequent years, New York consumers had fewer and fewer such flagrant fakes offered to them, and through fewer and fewer stores. Most of them engaged laboratories to test for them as Macy's did and pretty much the same rules for the enforcement of the laboratories' findings were laid down.

And so we also became alive to the necessity for reducing excessive shrinkage in cotton yarn goods—something you hear little about now; at least I don't. We became alive also to what needed to be done to properly construct textile fabrics—standards, in a word—and while we do hear of flagrant cases even in this day in some areas, the number is a whisper compared with the roar some years ago. Standards were laid down also for painted toys, prohibiting the use of lead in them. We kept harmful depilatories off the market. The list is large, impressive, constructive.

I cite this personal experience only to indicate that standards set up and observed by a single firm immediately or ultimately have an impact on an industry. Others see in it, or them, an advantage to themselves, or a decided block to their advantage. We have no right to criticize motives. For whatever purpose a standard is observed, good comes because the standard is good.

In sum, you must put a capital R on the retailer when you speak of his viewpoint on performance standards. The topflight retailer, the long-view retailer will want standards and will do all he knows how to do to establish them, to observe them and by example, at least, persuade others to do likewise.

The need for performance labels

By M. J. Lovell

AMONG all of the variegated segments of the men's, women's and children's apparel industry, shirt and pajama manufacturers have been in the forefront in recognizing and acknowledging the fact that the end-use performance of their products is as important in the consumer scheme of things as style, quality and price. In fact, we have always taken the lead in seeking to establish on an industrywide basis those performance qualities which would best enhance our product and satisfy the consumer, by issuing uniform standards and test specifications, either our own, or those established by the technical groups.

We know that consumers look for satisfactory performance and wear in the apparel they buy and that this is a determining factor in their purchases. Recognizing this, for instance, we, along with many other groups, opposed the Textile Fiber Products Identification Act feeling that for the consumer to know what the component fibers are would be of less value than to know how the garment would wear and how it should be cleansed. Accordingly, we suggested to Congress that we would favor mandatory performance standard representations to appear on apparel rather than what was suggested. Now, with the Act in effect for eight months, I thing we can all agree that that argument still holds water,—mandatory fiber identification still means nothing and the consumer still seeks performance information.

Our Industry is wholeheartedly in favor of it. First of all, over the years, we have established size and sizing standards for dress shirts, sport shirts and pajamas, and have had them adopted by the Department of Commerce as national Commercial Standards. While standard sizing is more or less an industry

Lovell is director counsel of the National Association of Shirt, Pajama & Sportswear Manufacturers, a group he has represented for the past 27 years. A practicing attorney, he has specialized in trade association representation in the apparel and textile industries. For many years he has been an active member of the United States Olympic Committee for which he has been in charge of apparel procurement through means of donations from manufacturers.

M. J. Lovell

convenience and a guarantee that the consumer will receive no less than a minimum of size and fit, this is important because correct sizing is a concomitant of apparel performance.

We have, however, gone further than this. A number of years ago in collaboration with national men's wear retailer groups and the respective institutes of the laundering and drycleaning industry, we issued Specifications for the Labeling of Men's and Boys' Shirts, Pajamas and Sportswear in order to make uniform and to standardize the representations which manufacturers might make with respect to the washability and dry cleanability of garments and based, moreover, upon the various standards which have been established by the AATCC relative to color performance, staining, shrinkage, chlorine retention, etc. This was a beginning effort by any industry and so widespread was its reception that it was recommended to the American Standards Association to be considered for incorporation in the revision of L22 which was then being contemplated. L22 was released several months ago with these standards included as part of performance standards and tests and recommended for all apparel. In fact, our Association was a part of this vast and great project of revision and has heartily endorsed the L22 Standards, as revised, and recommended them to our membership.

Three years ago, when all-cotton wash and wear had burst upon the apparel scene, it was our Association which immediately went into an intensive study of the various washability and ironability claims which were being made. After many months of work we issued a set of Standards and Specifications for Men's and Boys' All-Cotton Wash and Wear. Without going into the details, we again standardized the element of manufacturers performance claims, the various washing methods involved, and the various standard tests which must be complied with in order to make the different wash and wear claims, covering such elements as discolorations, odor, tensile strength, color fastness, shrinkage, and garment construction.

Last year, men's and boys' knit sport shirts became a large factor, but we early discovered that there were no standards either as to size or sizing, or performance, which manufacturers could go by. Again, with our industry determination that our product must be a satisfactory one for the consumer, a Committee of the Association went right to work to standardize sizes and sizing and released them to the nation just this past July. This Committee is now working on end-use performance standards for knitwear. It is dealing with an element, namely, knit goods, which is more elastic than woven goods, the elasticity varying even from stitch to stitch, and which has greater shrinking tendencies besides having innumerably more problems relative to color fastness, tensility, etc. We hope to be able to announce performance standards in these respects very soon.

There have been other such projects in our group, some to a lesser or greater degree, such as, for instance, our issuance of a Standard Procedure of Quality Evaluation for Woven Textiles. This was compiled with the collaboration of the Textile Division of the American Society for Quality Control. While not a direct end-use or performance element it is, nevertheless, related to such an element because we feel that every aspect of quality which goes into a garment, whether of fabric or manufacture, shows up in the performance of that garment when worn and used by the consumer.

I point these things out not only as an illustration of what an industry can do in these respects when it is honest and desirous of doing a good job, but also to point out that we think it is good business where uniform performance standards enter into the picture. I am sure all textile people will agree that the product of our Industry has high acceptance, is respected and, we think, results in ever-increasing figures, both of production and dollar-volume. We can assure the industry that wherever and whenever we are called upon to cooperate in the instituting and application of performance standards, we always stand ready to respond.

A program of "minimum limits"

By James L. Fri

UPHOLSTERY fabric manufacturers and furniture fabric buyers have for some time been cooperating in the development of mutually acceptable testing procedures and recommended minimum limits for certain characteristics or qualities of fabrics. The initiative for this program and its motivation are based on the consideration that the best possible performance of furniture and fabrics is the mutual responsibility of producer and distributor alike.

Its major objectives are (1) to provide a means for getting more uniformity in testing procedures and in the language and terminology used in reporting the testing results to interested fabric buyers; (2) to encourage more testing of certain types of upholstery fabrics, in order to screen out some of the major causes of complaints before the fabrics enter the distribution channels.

For this reason the tests which have so far been considered by the UDFMA Technical Committees concern the characteristics or qualities of fabrics that have been reported as giving most trouble either in production or in end use. The tests and limits so far recommended are for breaking strength, tear strength, shrinkage, fuzzing, stretch, abrasion resistance, effects of solvents upon shade, colorfast-

Fri is president of the Upholstery and Drapery Fabric Manufacturers Association. He assumed this post in 1946 after serving as manager of the merchandising division of National Retail Merchants Association. He taught merchandising at New York University for five years and is the author of a number of books on marketing and merchandising. He is a graduate of Ohio University and also received the degree of Master of Business Administration from Harvard Business School.

ness to light, gas fading, crocking and seam slippage. In developing their proposals these committees followed, insofar as possible, the "textbook" or standard tests as approved by the American Society of Testing Materials and the American Association of Textile Chemists and Colorists, so that there could be uniformity in testing procedures and in reporting results among fabric mills, regardless of whether the testing is done in the mill's own laboratories or by an outside commercial laboratory.

Fabric manufacturers have been spending millions of dollars annually for development and testing of fabrics before they are put on the market. Much of this testing must of necessity be on a comparative basis. That is, every firm sets up a continuing record of the performance in end use of each type of fabric, and new fabrics are compared with this historical data as to construction, finish, etc. Thus every dependable firm is building continually on the hard core of experience of fabric performance in actual end use, coupled with laboratory evaluation for those characteristics for which specifications have been developed.

The particular value of the present cooperative program is that, for the first time, the testing methods and limits included in the recommendations represents the composite thinking and practice of a group of technical men who have exchanged ideas and generously pooled knowledge gained by long years of individual experience to provide buyers with the best information available from the fabric production industry. In announcing the program to fabric producers and furniture manufacturers it has been made clear that the proposed uniform testing procedures and limits are only for the information of interested buyers and not "step one" leading to requests for "warranties" or "guarantees".

When fully understood and utilized, it is expected this program will provide a means for "rifle shooting" the trouble areas without disturbing the present satisfactory relationships between most buyers and sellers, and without imposing unnecessary additional costs on production and distribution.

How standards are set up

By J. W. McNair

THE CONSTITUTION of the American Standards Association provides that the Standards Council shall approve such standards as it may find to be supported by a consensus affirmatively expressed of those concerned with the standards, but *not to* formulate standards. This simple requirement is really the backbone of all ASA Procedure. A number of different procedures designed to fit different situations are provided but in each case a consensus is required.

Perhaps the most commonly used procedure is the so-called sectional committee method—typical examples of which are L22 and L24. The ASA is not a self-starting organization—a project is only started under ASA procedure following a formal request from a trade association, technical society or other organization importantly concerned with the subject. Upon receipt of such a request the ASA staff makes a study of the question and the proposal is then referred to one of the 14 standards boards of the ASA, under whose auspices a general conference of all those having an interest in the proposal is held. The conference is asked to provide answers to the following:

a) Is the proposal suitable to national standardization?
b) What shall be its scope?
c) Who shall act as sponsor?
d) What organizations shall be invited to membership on the sectional committee?

The sponsor of a project is responsible for the administrative details of the work. The sponsor proceeds with the organization of the sectional committee under an approved scope. Those substantially concerned with the project must be given the opportunity for representation on the committee, which in turn must be balanced so that neither the consumers, producers, or general interests on the committee shall have a clear majority.

The sectional committee does its work through subcommittees, task groups, through reference to committees of other organizations, or any other suitable means. After agreement has been reached on a proposed standard by one of these groups it is circulated to the sectional committee and is often discussed at a meeting. A written letter ballot of the sectional committee must be taken and all the votes accounted for. If negative votes are received reasons must be presented for consideration by the committee. Attempts must be made to resolve the questions on which such negative votes are based.

McNair is technical director of the American Standards Association. He joined the staff of ASA in 1930 and shortly thereafter became engineer in charge of the standardization projects in the electrical field. In 1954 he was named assistant technical director and he assumed his present position in 1957. He received a degree in electrical engineering in 1924 from the University of Virginia.

J. W. McNair

All of the facts concerning the proposed standard as developed by the sectional committee are then examined by the sponsor which adds its technical endorsement and transmits the whole package to the ASA for further examination and analysis. If a consensus has been established in the minds of the responsible standards board and the Board of Review—which acts for the Council on the approval of standards—the proposed standard is declared to be an American Standard.

Roughly, the other methods available for use concern existing standards which may be approved by the American Standards Association on the basis of the same consensus principle, provided that they are supported by written statements of acceptance by the organizations concerned with them. These methods are most suitable for long-existing and widely used standards, such as those of the American Society for Testing Materials and the American Association of Textile Chemists and Colorists. The sectional committee method is most widely used in cases where a number of standards must be coordinated into a single national standard or where no standard exists and must be established from basic technical data.

Standards which are approved as American Standard are the voluntary products of the best agreement which can be reached through the coordination of American technological know-how. They are voluntary standards which are recommended for use by manufacturers, and users alike. There can be no question but that the existence of American Standards is of outstanding benefit to science, technology and industry.

How hospitals use standards

By R. H. Layer

Layer is research director of the Hospital Bureau, Inc., whose staff he joined in 1955. Earlier he was engaged in editorial work for McGraw-Hill and did pharmaceutical production and purchasing work for Parke-Davis and other companies. He received from University of Michigan a bachelor's degree in science and engineering and a master's degree in engineering.

THE HOSPITAL BUREAU, which I represent, is one of a dozen associations in the institutional field that are interested in encouraging the utilization of standards. Our own activity dates back at least 25 years. Most recently, for example, representatives of the Bureau have sat on American Standards Association Committees L22 and L24. Throughout this entire period, we have urged our members to orient their purchasing procedures toward use of standards. Some of them, we are gratified to learn, have been able to apply Federal Specifications, American Standards and similar references to their purchases.

More commonly, however, it has been our experience that most of the institutional buyers have found the road to purchasing through standards a difficult one to travel. The reasons for this lack of progress are several: inexperience in interpreting standards in terms of institutional needs; lack of facilities for checking incoming shipments for adherence to standards; and ignorance or unwillingness of suppliers to describe the qualities of their goods in terms of standards.

For these reasons, we are especially enthusiastic about supporting a venture which will carry the burden of applying standards to the point where the purchaser can readily pick it up. Specifically, we heartily endorse the program that was initiated by the American Hotel Association in 1959.

To review the history and status of that activity briefly: In that year a certified products program was set up which provided for the listing as "approved" of cleaning and maintenance products which had been tested by a designated laboratory for compliance with the American Hotel Association minimum performance requirements. The next year, 1960, marked the addition to the Products List of the Certification of Institutional Textiles. During this first year, which ends January 31, 1961, the certification of textiles was handled on the basis of the manufacturer or supplier submitting a notarized affidavit certifying that the article in question met all the requirements of the appropriate American Standard L24.

Beginning with the 1961 Certified Products List, there will be an additional requirement that the manufacturers and suppliers submit a copy of the laboratory test report used as the basis for the certification. Textile manufacturers and suppliers are not charged for the listing. They are expected to bear the cost of any testing in connection with their certification, but they are in no way restricted as to the laboratory that can be employed.

Products currently included under this category are: awnings and canopies, decorative bedspreads, glass fiber window curtains, window curtain fabrics, woven drapery fabrics, woven slip cover fabrics, woven upholstery fabrics, bath mats, dish towels, glass towels, huck towels, terry cloth towels, printed table napery, table napery (damask type), woven bedspreads, woven blankets, woven shower curtains, table napery other than damask, tailored uniforms intermediate (year round) suiting, tailored uniforms light weight (tropical) suiting, overcoats, cotton & linen washable uniforms for men & women (light duty), cotton & linen washable uniforms for men & women (heavy duty), uniforms for men & women (man-made fibers, silk and blends), aprons (loom finished), coveralls, shop coats, overalls, and dungarees (light duty), work shirts (light duty), work shirts (heavy duty), work pants (light duty), and work pants (heavy duty).

In addition to these products covered by L24, two items may be certified under American Standard L4; these are Bleached Cotton Bed Sheets and Pillow Cases.

To encourage our members to utilize these certified products lists, we continue to remind them of their many advantages, some of which are as follows:

1. Elimination of Trial and Error Testing. Obviously it is impossible for the purchaser to test every product that is offered to his institution. It would be even more difficult for him to be present while the tests are being run to insure that they are properly performed and that no personal likes and dislikes influence the results of the test.

An independent laboratory with its competent teams of technicians and scientists can easily perform these tests and determine which products are acceptable and which are not. Since such programs are initiated, sponsored, and published by associations, the purchasing agent reaps the benefits of such testing without expending any of his own effort.

2. Time Saved. When the purchasing agent has his "approved" list at hand, drawn-out interviewing time may be eliminated by the question, "Is your product on our 'approved' product list?" When the product has been "approved", both buyer and seller recognize that a basis for discussion has already been firmly established. Interview time can then be devoted to considerations of extra features, price and delivery.

3. Manufacturer Pays for Tests. Institutions should not have to bear the costs of learning whether the products they use are acceptable. Because the manufacturer can absorb the testing charges as a small portion of his advertising expense, it would seem to be only fair that he do so. Measured against the thousands of dollars spent for promotion, the test costs (perhaps $100 per product) are virtually negligible. Surely the good will engendered by supporting the program is worth many times the cost of the testing.

4. Protection Against Losses. By using approved product lists the purchasing agent is provided with a means of screening out those products which might cost the institution thousands of dollars due to failure to perform adequately.

As an example of this last point: lack of protection against losses, far from being a theoretical consideration, can be a costly experience as, I am told, one of our leading hotels discovered recently. It appears that a purchase of drapery material had been made without benefit of testing or application of standards. After an all-too-short period of hanging, the draperies (according to the report) had deteriorated to the point of needing replacement. We are gratified to learn that as a result of this unfortunate experience, the hotel is now routinely requiring that all purchases be pre-tested wherever practicable.

We are confident that an increasing number of institutions will, through the efforts of their participating trade associations, take the buying-by-standards route through the medium of the certified products program. As you may already know, this year 23,000 copies of the Products List were distributed to the members of the participating associations; and it is expected that the demand will be even greater in 1961.

Because the program deals in intangibles, it is, of course, not possible to assay quantitatively the immediate results of our efforts. From early indications, however, we have evidence that institutional purchasers appreciate the kind of tool that certification puts into their hands. Some have requested additional copies of the list, some have written in unsolicited notes of approval, and some, we are pleased to report, are, by insisting that suppliers apply for certification, themselves taking an active part in the drive toward utilization of standards.

Hercules Buys Industrial Rayon's Nylon Plant for Conversion to Olefin

Industrial Rayon Corp. in November announced that it was ending operations at its nylon plant in Covington, Va., and that it had sold the plant to Hercules Powder Co. which will use it to produce polypropylene fibers with a capacity in excess of 10 million pounds a year.

Industrial Rayon also revealed that it has discontinued its manufacture of knit fabrics at Covington. Industrial is regrouping its facilities in an effort to eliminate losses. The company is consolidating its rayon textile yarn operations at its plant in Painesville, Ohio, where it also produces rayon Tyrex tire yarn.

Frederick L. Bissinger, president of Industrial Rayon, said that concentration of its rayon producing operations at Painesville will permit more efficient operations and will place the company in a better position to serve the needs of its customers in the tire and textile yarn fields. He said that this move will increase Industrial Rayon's ability to return to profitable operations. He explained further that the company is studying means for the most effective utilization of its assets in the best interests of the stockholders, including the acquisition of various properties by way of merger or purchase.

Hercules has set up a fiber development department and appointed Forest B. Evans as manager. Hercules will convert the nylon section of the plant acquired from Industrial Rayon to the production of polypropylene textile staple and continuous filament yarns from the company's "Pro-fax" crystalline polypropylene. Hercules' resident, A. E. Forster, said that the company does not intend to enter the nylon or rayon fiber fields. He also said that Hercules does not plan to manufacture heavy denier monofilaments which are already well-established commercially, he noted, by several Hercules polypropylene resin customers.

The new Hercules fiber development department will be a development group as distinguished from the company's eight operating departments. Evans said that the operations of the new department will be directed toward evaluation and development of markets for polypropylene staple and filament yarns. Before assuming his new post, Evans had been assistant general manager of Hercules' Virginia Cellulose Department since 1952. Hercules has one polypropylene manufacturing facility at Parlin, N.J. and another nearing completion at Lake Charles, La.

It was also made known that Dr. Gilman S. Cooper had resigned his position as vice president in charge of research for Industrial Rayon to join Hercules as director of research and development of the company's fiber development department.

Hayden B. Kline Resigns

Hayden B. Kline resigned last month from his post as chairman of the board of directors of Industrial Rayon Corp. He will remain as a director and will continue to be actively affiliated with the company. He completed 35 years with Industrial last month, having served as president from 1949 to early last year.

Panel talks to mark AATT annual meeting

THE PROGRAM of the annual meeting of the American Association for Textile Technology, featuring 33 leaders from the Textile industry, retailing and consumer interest groups, will explore the timely and vital question of how to cope with the many problems raised by the flood of new manmade fibers and fiber modifications.

The program, which will be open to all members of the textile industry and related fields, will be held at the Hotel Commodore in New York City on February 8, 1961. A capacity audience of 1600 persons is expected. The luncheon speaker will be J. M. Cheatham, President, Dundee Mills, and currently president of the American Cotton Manufacturers Institute.

The morning and afternoon sessions will each consist of two, one-hour panel discussions with a separate keynote speaker laying the ground for each of the panels. The questions will be polled in advance from registrants. The panel areas are: (1) retailing and consumer related problems; (2) end-product manufacturer; (3) converting; (4) mill operations. A representative of a major fiber producer will be on each panel.

The members of the annual meeting committee are: general chairman: Albert E. Johnson, National Institute of Drycleaning and a director of AATT; administrative chairman: Erb Ditton, past president of AATT; program: A. H. McCollough, MODERN TEXTILES MAGAZINE, official publication of the papers of AATT; registration: C. J. Waitkus, E. F. Drew & Co., Inc., Boonton, N. J.; publicity: Harry Martin, Manhattan Shirt Co.; Hotel arrangements: Andrew Strom, Waumbec Mills, Inc. Registration cost including luncheon will be $15. Advance registrations may be made by contacting C. J. Waitkus, E. F. Drew & Co., Boonton, N. J.

A detailed program of the panel discussions planned for the meeting, along with names of participants, follows.

AATT Annual Meeting Panelists and Speakers

Introduction of program and panel moderators

A. H. McCollough, publisher, MODERN TEXTILES MAGAZINE (Program Chairman)

Retailer Panel

Moderator—E. Freedman, Macy's Bureau of Standards

Speaker—P. J. Fynn, Director of Laboratories, J. C. Penney Company

PANELISTS

Dr. Dorothy S. Lyle, Director of Consumer Relations, Nat'l. Inst. of Drycleaning and President of American Home Economics Association. (Dr. Lyle represents both consumer and service industry interests)

Margaret Ingersoll, Editor, Vogue Magazine (Fashion interests)

William Burston, Manager, Merchandising Division, Nat'l. Retail Merchants Association (Department stores)

Genevieve Smith, Manager, New York Laboratory, Sears, Roebuck & Co., and member of Board of Governors of AATT (Mail order field)

Laurence T. Gerrity, General Merchandising Manager, Celanese Fibers Company (Fiber representative on panel)

End Product Manufacturer Panel

Moderator—Dr. Geo. Wham, Research Director, Van Heusen Products Co.

Speaker—William Doniger, president, McGregor-Doniger, Inc.

PANELISTS

Lester Schwartz, Vice President and Director of Merchandising, Bobbie Brooks, Inc.

Dr. Stephen J. Kennedy, Research Director for Textiles, Clothing and Footwear, QM Corps Research & Development Command

Walter Guinan, President—Karastan Rug Mills, Inc. (Floor Coverings)

Edward Fricker, Director of Purchasing, Kroehler Co., Inc. (Upholstery Fabrics)

Gerald Lake, Director of New Products Development, Burlington Industries, Inc. and formerly vice president Industrial Fabrics Division (Industrial Fabrics)

Henry E. Froehling, Director of Marketing, Textile Division, Du Pont Company (Fiber representative on panel)

Converter Panel

Moderator—Arthur Spiro, Vice President, Waumbec Mills, Inc.

Speaker—Abbott Copeland, Vice President, United Merchants and Manufacturers, Inc.

PANELISTS

Walter Ross, President, Rosewood Fabrics and former President Textile Distributors Institute (Men's and women's apparel fabrics)

Milton Stern, Vice President, Titus, Blatter & Company (Drapery fabrics)

David Travis, President, Travis Fabrics, Inc. (Industrial fabrics)

Fred Fortess, Manager, Dye & Finish Labs., Celanese Fibers Co. and Vice Chairman of Technical Committee on Research, American Association of Textile Chemists and Colorists (Dyeing and Finishing)

Stanley H. Rose, Manager, Merchandising, American Viscose Corp. (Fiber representative on panel)

Mill Operations Panel

Moderator—Stanley Backer, Asst. Professor of Mechanical Engineering, Massachusetts Inst. of Technology

Speaker—Robert M. Cushman, Exec. Vice President, Amerotron Company.

PANELISTS

George Asnip, President, Worsted Manufacturing Division, Deering-Milliken Co., Inc. (Spun Woven Fabrics)

G. M. Shipman, Manager, Technical Dept., Synthetics Div., J. P. Stevens & Co., Inc. (Filament Woven Fabrics)

Max Thal, President, Alamac Knitting Mills, Inc. (Circular & Warp Knit Goods)

Michael Strub, Jr., Manager, Technical Department, Duplan Company (Filament Yarn Processing)

Joseph C. Haufe, Manager, Non-Woven Fabrics Div. Wellington Sears, Inc. (Non-Woven Fabrics)

Amos Griffin, Director of Merchandising, Textile Division Eastman Chemical Products Co., Inc. (Fiber representative on panel)

Summary Speaker—William E. Clark, Vice President & General Manager Textile Div., United States Rubber Co. and Chairman of Board, Textile Research Institute.

Home Furnishing Fabrics

(Continued from Page 22)

Other trade reports note a similar increase in nylon carpet consumption. At a fall seminar for floor coverings dealers and their salesmen at the Los Angeles Home Furnishings Mart, John Hoff, Monarch Rug Mills, pointed out that nylon as a carpet fiber had regained the prestige it began losing a few years ago because of improper industry activities. These activities, he explained, included carpet mills' using nylon fiber not intended for floor coverings, and promoting blends with a small percentage of nylon in a way that suggested the carpet was composed entirely of nylon.

An increase of as much as 35% for the industry by 1965 is foreseen by Joseph L. Eastwick, chairman of James Lees and Sons Company, according to his talk at the annual sales conference of his firm held last month. Relating this growth to fashion innovations, he said:

"We are told that each year a greater percentage of the disposable income is going into so-called non-essential items. This figure today is placed at 41% and projected to 46% by 1965, an actual 38% dollar increase. To those of us in a style industry, we have already recognized this in the fashion demands and style awareness of our customers. Our problem is not one of demand, but rather of ingenuity to meet that demand."

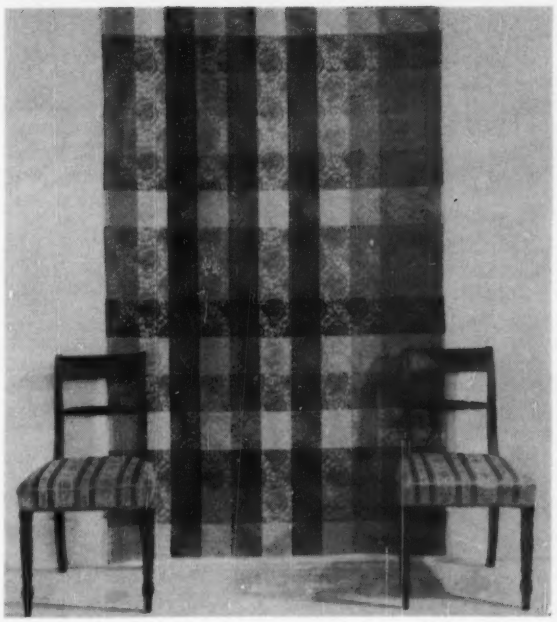
That ingenuity can be seen in the many new concepts of carpet design which utilize the new properties of manmade fibers and fabrics, notably, for the past year, their improved dyeability and color fastness. These characteristics are usually combined with new textures to produce luxurious-looking carpets that are practical at the same time by virtue of the wear qualities imparted by the manmades.

Swedish rug designer, Bittan Valberg, for example, has created tufted carpets and rugs of Acrilan, Chemstrand's acrylic fiber, that blend a variety of colors and shades of colors, sometimes mixing as many as 30 variations. The resulting mosaics, cobblestones or striated effects have been compared with fine paintings—in fact, they were exhibited at the Atlanta Museum in September. Bittan Valberg's rugs were originally custom-made items priced as high as $180 per square yard; now Cabin Crafts-Needle-tuft is producing her Signature Collection of Acrilan rugs at popular prices.

Cabin Crafts has also achieved interesting color effects in its Country Spice carpet made of four-color Acrilan yarn and for this development received a special American Institute of Decorators Citation on January 8th, during the Institute's annual awards dinner. The carpet is said to coordinate automatically with practically any decor or color scheme because of its "family of color," produced by the multicolor yarn. Fourteen different shadings are available.

A new self-decorating idea using Acrilan floor coverings was initiated in the fall by Altman's, New York department store. The service offers "Elegante," a high-pile carpeting of Acrilan, in any size or shape a customer chooses, and in a variety of combinations and patterns, also selected and designed by the customer. She can combine any of 15 colors into checkerboard, sunburst, floral designs, borders, wall-to-wall carpeting, area rugs, even wall coverings.

Chemstrand reports that 12 new lines of Acrilan carpet are being introduced this month, making a total of more than 60 lines in hundreds of colors. The company also reports that Acrilan carpet is gaining importance in the contract carpet field. This market incidentally, is one which the industry at large is finding to be significant in the expansion of future business inasmuch as more new commercial buildings are under construction throughout the country.



NOVEL TAPESTRY—This unique wall decoration is a manufacturer's "blanket" of Acrilan acrylic fiber. Classic Weaving wove the "blanket" to show furniture manufacturers the scores of colors possible with Acrilan upholstery fabrics. Acrilan is well-established in this end use

Lees' 1961 carpet line is a good example of the color mastery and texture innovations that prevail at the January market. Made of wool or nylon, the carpets are combinations of several of the colors recently introduced by Lees in monotones and enthusiastically accepted by homemakers. When similar colors are combined, the effect is iridescent; when contrasting colors are combined, a subtle pattern definition is achieved. Lees new texture effects are produced by a new loom technique, which enabled Lees' designers, with inspiration from Early American handcraft products, to create hooked rugs. In the group called Prairie Ripple, loops of varied length create a sculptured effect that imparts the handmade look. Happy Day is a ripple-textured loop carpet in continuous filament Du Pont 501 nylon. It is available in 10 shades, including a green-blue, turquoise-grey, two shades of gold and avocado-olive. Whispering Wind, another Lees carpet for 1961, is a carved plush wool carpet with a graining effect resembling weathered wood. It is made in 15 shades.

Firth Carpet Co., stressing low-budget or modest-budget categories in its 1961 new lines, describes its offerings as "proof that modest-priced carpets can be as tasteful, and decoratively correct and reflect just as much skill as the more lush custom floorcoverings." It is featuring about 12 new lines, most of them to retail at $6.95-$10.95 and a small group of high fashion luxury qualities at $12.95-$16.95. Varied textures and colors appear in different weaves, including velvets,

cantilever, knit and tufted effects. Fabrics include Acrilan piles, all-wools and a variety of blends.

Artloom Carpet Co., also introducing a series of budget-priced broadlooms, has a total of 10 new lines this year. They are made of wool, filament nylon, Creslan acrylic and nylon, and spun nylon and cotton. On the budget group, the company reports, a special custom dyed feature permits the selection of any special shade in small yardage minimums with no premium in price.

Bearing out reports on the growing use of continuous filament nylon, Textured Caprolan is featured at this month's market in a wide range of stylings, including single-level loop, high-low loop, nubby, and plush cut pile carpet and high-fashion area rugs, by a number of producers. Textured Caprolan, Allied Chemical's yarn, was the first continuous filament nylon yarn in carpet and was debuted in Croft Carpet Mills' "Resort" line at the Chicago summer market of 1958.

Callaway Mills at the spring 1960 market introduced the first knitted carpet of continuous filament nylon in its Aristique line; in its Electrique, the mill pioneered plush cut-pile texture of continuous filament nylon. Unusual color effects in Callaway's carpets are produced by the company's process called "Ombre-Dyed," by which as many as eight tones of the same hue are incorporated in a yarn.

Another first for continuous filament nylon carpet in 1960 was Carter Brothers' use of the fiber in area rugs in its Star Flight collection. The rugs, made of skein-dyed yarns, are in varied pile heights, textures and color combinations.

The widespread use of continuous filament nylon carpet in varied commercial installations is demonstrating the versatility of this carpet. Allied Chemical reports installations of Textured Caprolan nylon carpet in passenger trains, automobile showrooms, office buildings, railroad cars, a Great Lakes luxury ship, hospitals, bowling alleys, and motels. The company notes the fiber's suitability for these heavy traffic installations because of its durability, and soil resistance qualities.

In addition, here's a novel application of Textured Caprolan nylon carpet by Callaway Mills: Ski-Dek, a carpeted artificial moving ski slope for indoor practice of ski maneuvers. A belt of carpet passes over a system of rollers set at an adjustable angle to create a slope. Caprolan was chosen, it is reported, because of its durability and resilience and because its extra pile gives skiers proper "edge control" for their fast-moving skis.

Cumuloft nylon is Chemstrand's continuous filament textured yarn which was introduced a year ago. For spring 1961, 16 mills will feature 26 lines of Cumuloft nylon carpet, 12 of these lines being introduced this month. Chemstrand reports that it is planning a strong merchandising, advertising and promotional campaign in support of spring selling. It has also announced new specifications in its quality standards trade licensing program which reduce the minimum Cumuloft requirement for pile weight yarn in carpets from 21 ounces to 20 ounces per square yard. The explanation given for the change is that Cumuloft has proved its ability to provide superior coverage and maximum performance in soft floorcovering.

To augment its first national advertising campaign for 501 nylon, its continuous filament fiber, Du Pont made known last month an even bigger promotional effort in the spring of 1961. More than 8,000 department, furniture and floor-covering specialty stores in every major market area in the U. S. will participate. According to J. R. Emery, Du Pont marketing manager for carpets, the promotion will be the most far-reaching for 501 nylon since it was introduced two years ago. Mills taking part in the program by offering 501 nylon carpets will be Barwick, Bigelow, Cabin Crafts, James Lees, Monarch, Alexander Smith and Wunda Weave.

A new line of hand-carved nylon accent rugs, containing Du Pont six denier nylon, was introduced by Aldon Rug Mills at the June market. According to Aldon spokesmen, the new rugs are an answer to consumers' requests for washable accent rugs. It therefore subjected four rugs made with Du Pont nylon and four other manmade fibers to laundering tests in which the pile surface of the unidentified manmade fibers took on a shaggy appearance after one washing and drying, and the nylon rugs showed no surface change after three washings.

CARPET SKI SLOPE—Allied Chemical's Caprolan nylon in this carpet furnishes the surface for a new indoor ski slope that operates on the treadmill principle. Its inventor, Ray Hall, is shown giving ski instructions to Barbara Knapp in a demonstration at the National Winter Sports Show in New York

Du Pont's spring campaign also promoted Orlon carpet fiber which was presented for the first time last January by Alexander Smith in blends with modacrylics and by C. H. Masland in blends with wool. Masland, at the June market, added to its Cornucopia Collection of Orlon-wool carpets, a velvet called Alberta and added new colors.

The January 1961 showings project other developments that ensue from news made a year ago. Eastman announced new Verel carpet fiber at the January 1960 market. For fall, the chemical company jointly campaigned with Roxbury in a promotion of the carpet company's three carpet styles with loop pile face of the modacrylic fiber. The national campaign which was themed, "Home is Where Verel Is" stressed texture, color, soft and luxurious hand, and resistance to abrasive wear.

Following announcement last January by American Cyanamid of forthcoming commercial production of Creslan acrylic carpet fiber, Archibald Holmes & Son produced Conquista, an 80/20 blend of Creslan with modacrylic. The pattern and colors reflect the influence of Spain and the Spanish Southwest of the U.S. The carpet is knitted in a multi-level loop pile by Holmes process called Loc-Pile, which is described as a method that lock stitches the pile yarn to hold each tuft firm, thereby providing fabric stability similar to that of woven carpet. Cyanamid reports that the knitting method plus the strength of the Creslan fiber contributes to the carpet's long-wearing quality and the multi-level pattern disguises traffic marks. It also relates this new carpet to a general trend toward more knitted carpet, noting the advantages of faster production at lower cost than woven carpet and of having costly pile all on the face where the wear is.

To show the versatility of Creslan fiber in carpets, American Cyanamid retained carpet stylist Edward Fields to create a collection of 20 sample rugs with a range of yarn effects, textures, weaves and colors.

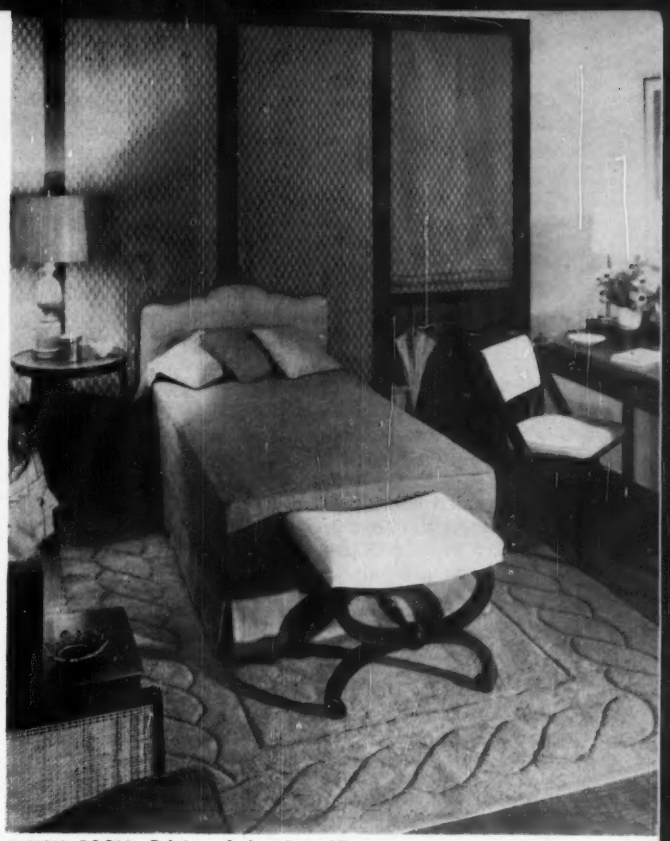
Emphasis on proven best sellers is the 1961 approach of Aldon Rug Mills, Inc. Broadloom Division. Although Aldon is bringing out two new lines, the mill emphasizes that salability has been pretested. The new lines are Serena, a 100% nylon plush in 16 colors and Saginaw of Caprolan continuous filament nylon, styled in three-color tweed and with a texture described as geometric boucle.

New Wiltons are offered by Masland and Downs Carpet Company, Inc. Masland's has plush velvet and tufted fabrics, and has added new colors to many of its proven grades. Downs features woven all-wool jacquard in seven colors; a ripple textured fabric with mosaic motif in two-tone and three-tone color range; and swirl design in plain colors.

Draperies and Curtains

Color and texture is equally significant in current draperies as in carpets, permitting the coordinated merchandising of home furnishings suggested by Burlington in its fashion review this month.

So much like apparel fashion has the home furnishings market grown, in fact, that five of the world's leading fashion designers were commissioned by the Fiber Glass Division of Pittsburgh Plate Glass Company to collaborate with five major drapery firms on the creation of a collection of fiber glass drapery fabrics. The designers were Tom Brigance, Hannah Troy, Cecil Chapman, Pauline Trigere and Adele Simpson. The drapery firms were Charles Bloom, Inc., Qual Fab, Inc., Covington Fabrics, Titus Blatter and Waverly Fabrics. The complete collection, which



RAYON ROOM—Fabrics of American Viscose rayon are used as Roman shades to create the closet shown above; the upholstery fabrics in the room also contain rayon as does the carved rug

was the second of its type to be sponsored by Pittsburgh Plate and was on the consumer market for fall 1960 selling, consisted of contemporary prints as well as solids in new colors, and textured weaves. The Tom Brigance selections for Charles Bloom were the first screen print group the firm ever produced on fiber glass fabrics.

To help stores promote the designer drapery fabrics, Pittsburgh Plate set up novel display units consisting of life-size and life-like portraits of the designers and telephones through which each creator gave a recorded talk on his approach to fabric design and the practical features of the draperies. Called the Designer Drapery Fabric Center, each display unit was manned by a representative from Pittsburgh Plate who talked to customers about sewing fiber glass fabrics and acquainted sales personnel with background information.

That a fashionable drapery fabric must be practical as well accounts for the new interest in flame resistance. The newest fabric with this quality is made of warp of 100% Rovana saran micro-tape, a Dow Chemical Corp. fiber, and a filling of Eastman Verel and solution-dyed rayon. It was introduced in Drapel, casements by Spectrum Fabrics, that have the look of linen and homespun weaves, and are especially recommended for contract and commercial installations. Among the advantages noted for the fabric, in addition to resistance to flame, are: minimum shrinkage, resistance to moths and mildew, excellent drapability; no loss of strength from exposure to sunlight. Four Drapel fabrics displayed in November at the National Hotel Exposition at the New York Coliseum were a leno weave, a nubby stripe texture, a slub and a high-bloom surface created by the use of filling yarn spun on the worsted system.

Two drapery lines of the Rovana, Verel, rayon fabric are also produced by Delta Looms and Frankel Associates. Frankel has made boucle and leno weaves. Delta Looms has styled three fabrics: a luxurious antique satin, a more tailored novelty twill and a smooth face print cloth.

National Plastics Products Company reports increasing success with flameproof Saranspun draperies in commercial and institutional installations as well as domestic uses. Saranspun is woven of 80% Saran and 20% viscose. Huntington Products Co. has offered a color chart containing 48 color swatch samples and four base cloth samples of Saranspun drapery fabrics. Maharam Fabric Corp. has a catalogue showing 19 new patterns of Saranspun fabrics in its handprint collection called Contempo. The catalogue includes swatches. (For copies of either brochure write the editors.)

Consumer demand for greater performance as well as smart styling is stimulating more textile manufacturers to provide a wider variety of drapery and upholstery patterns with Sylmer finish, according to Dow Corning, producers of the silicone finish that imparts resistance to spots, stains and wrinkles. The demand for practicality also lay behind the announcement by Union Carbide Plastics Co. that its Krene vinyl film is now laminated to Royaltex wall fabrics, permitting the fabric to withstand physical abuse and repeated cleaning.

Solution-Dyed Draperies

Color has consistently been an outstanding feature of rayon and acetate draperies, hence descriptive terminology like Coloray for Courtaulds' solution-dyed rayon and "color-locked acetate" for Eastman's Chromspun. Courtaulds reported accelerated use of Coloray in draperies since the company introduced its colorfast lifetime guarantee in November 1959. The guarantee is given for draperies in which the color range is 100% Coloray and are clearly so labeled. Courtaulds notes the importance of Coloray sheers coordinated to antique satins and the blending of Coloray in non-flammable and colorfast draperies.

Eastman described its June market presentations as a "galaxy of color—including black" and appropriately showed, in addition to drapery and bedroom ensembles by a number of houses, Grosby Products' mix-and-match bedspreads, coverlets and dust ruffles, vanity skirts and multiple-size draperies and valances.

A new form of Eastman Estron acetate was introduced in June. It is described as a bulky yarn which provides a rich, supple hand and interesting surfaces. The draperies were prints and simulated damasks in constructions of 100% Estron acetate or blends with rayon or cotton.

In the field of drapery and upholstery fabrics, Industrial Rayon Corp. reports a number of expanding new uses for its rayon filament yarns and also for Strawn, its flat rayon monofilament. A new development for this market is Industrial's "Dy-Lok" solution-dyed rayon filament yarns in a variety of colors and in a denier range from 150 to 450. Home Curtain Corp. has brought out its "raised" brocade cotton-rayon draperies using Industrial's rayon. These ready-made draperies which retail for $9.99 for a pair 50 inches wide and 90 inches long are machine-washable and need little or no ironing.

Using Dy-Lok yarns, a number of mills are bringing out rich-looking jacquard patterned upholstery fabrics for furniture, while auto makers are making use of the same solution-dyed yarns for luxurious seat upholstery in original equipment in 1961 autos.

Industrial's Strawn rayon monofilament, already widely used in handbags and novelty footwear, is being cleverly adapted for casement cloths and in auto seat covers as a yarn that contributes both long-wear and novelty effects. Strawn and Dy-Lok are being successfully combined in attractive textured fabrics for hi-fi and TV grilles.

Industrial Rayon's yarns for upholstery fabrics are being used also, the company reports, to solve a knotty problem that has arisen in upholstery as a result of the increased use of foam rubber cushioning materials. These materials require a high degree of dimensional stability in the covering fabric. Such fabrics made with Industrial's yarns are so shrink-resistant, tests have shown, that aqueous cleaning solutions can be employed to clean them without disturbing the contours of the chair.

Fabrics Serve as Walls

During the January Market at the Merchandise Mart in Chicago this month, American Viscose Corp. showed five room designs by Paul Krauss. The designs made use of a wide range of fabrics containing rayons produced by American Viscose. The intention of the room settings, according to Krauss, is to show that fabrics can take the place of paint or wood in interior decoration. In the decorating schemes shown in the room settings, upholstery and drapery fabrics by Waverly, carpets by Callaway, Cabin Crafts and Aldon, and bedspreads by Morgan-Jones all were employed.

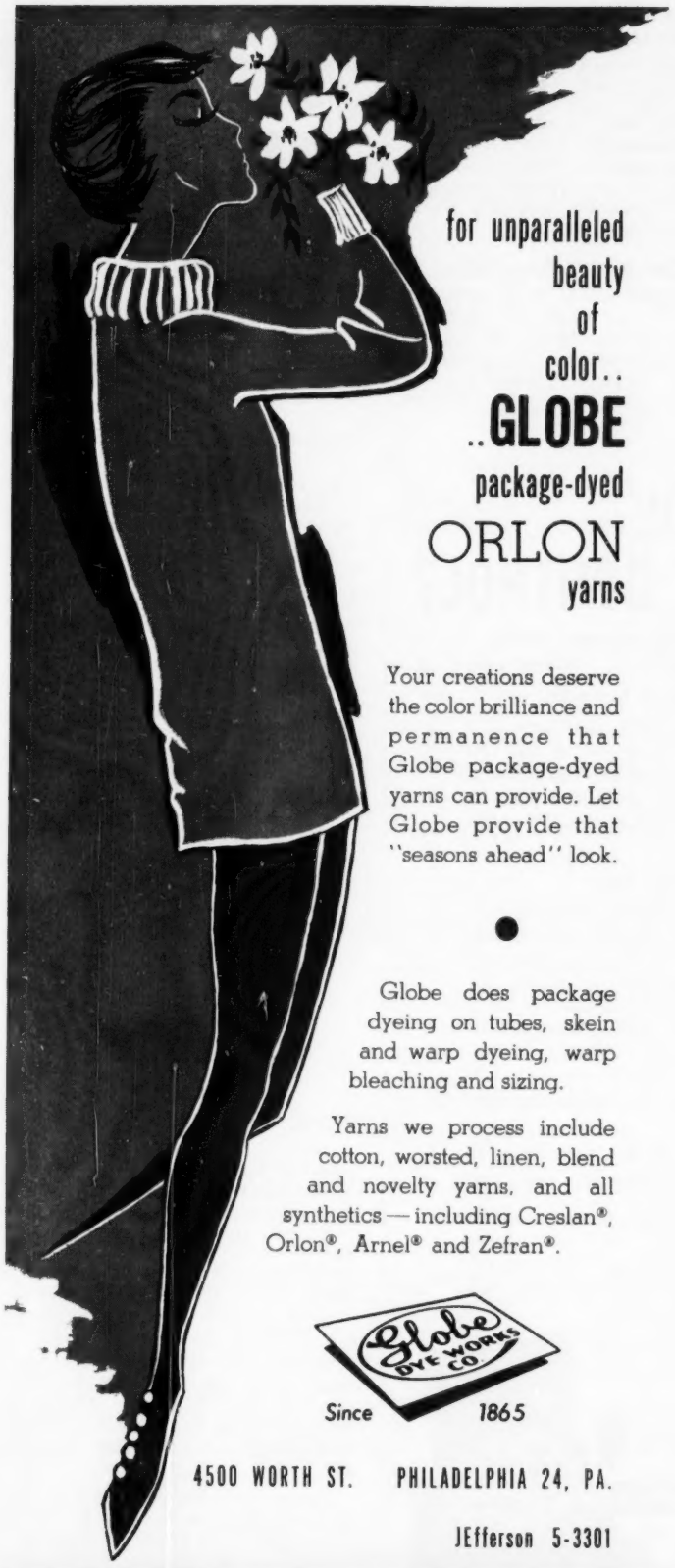
Lozano Fisher Studios are presenting new window treatments and complimentary upholstery fabrics in a group of handloomed blinds woven in the colorations of Stained Glass, Tiffany Glass and Leaded Glass. They were designed by Matias Lozano. The Stained Glass weave features the royal purples, garnets and ice blues of the Cathedral at Avignon. Wool, cotton and manmade yarns are dyed in varying values of the colors to produce iridescence and color movement, such that the colors appear to change and deepen from hour to hour, much like actual stained glass. The special upholstery fabrics developed to complement the window treatments combine iridescent colors like royal with orchid or magenta with blue. They are all-wool.

Kagan-Dreyfuss, Inc. is introducing to the U.S. and Canadian markets an imported line of lace curtain materials called "Vision Net." They are of cotton reinforced with Terylene to give strength and stability and are available in modern patterns of white or biscuit as well as a range of vat colors. They can be drip dried and are reported to require no ironing.

The concluding section of this report on home furnishing fabrics, including upholstery cloths and domestics, will appear in next month's issue.

TSA Dinner Jan. 25

The Textile Salesmen's Association will hold its 46th annual banquet and dance on the evening of Jan. 25 at the Starlight Roof of the Waldorf Astoria Hotel in New York City. The affair will begin with a reception at 6:30 P.M., followed by dinner and dancing until 1 A.M. Music will be provided by Jeno Bartal and his orchestra alternating with strolling violinists. There will also be a program of professional entertainment. Tickets are $15 a person including tax and gratuities. Reservations will be accepted for tables of ten with congenial seating for smaller groups. Reservations may be made by contacting M. J. Brady, secretary, at the Association's headquarters, 22 E. 38 St., New York 16, N. Y. LE 2-4176.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TEXTILE NEWS BRIEFS

Butterworth Lease Plan

A lease-purchase plan for Butterworth textile machinery has been announced by Stanley Brooks, vice president-sales, H. W. Butterworth & Sons Co. Under the leasing arrangement, a textile manufacturer will pay a percentage of the equipment cost monthly for three to five years. Upon expiration of the lease, they can exercise a purchase option for 6% of the original equipment cost, or renew the lease at a rental rate of 2% of the original investment annually. Brooks said that a 3-year lease is set up on the basis of 3.28% of the original equipment cost monthly, a 4-year lease at 2.58%, and a 5-year lease at 2.17%. Accelerated payment plans also are provided.

The lease-purchase plan, Brooks pointed out, makes Butterworth machinery available without the burden of a large capital investment. The plan was developed by Talcott Leasing Corp.

Enka Nylon Expansion

American Enka Corp. is reported to have started work on an expansion of its nylon facilities at Enka, N. C., that will result in 70% greater capacity. A large portion of the new nylon equipment will be devoted to production of heavy denier yarns for industrial uses, including tire cord, for carpets and other home furnishing fabrics. It is believed that the expansion when completed will bring Enka's nylon capacity to 34 million pounds annually. Enka already produces nylon staple fiber and fine denier filament nylon for apparel end uses. The company is also a major rayon producer.

Ponemah Cotton Looms Sold

George D. Flynn, Jr., liquidating agent for spinning equipment and excess cotton looms for the Ponemah Mills, Taftsville, Conn., reported 260 Draper X-2 looms have been sold. Ponemah is retaining some cotton looms but will concentrate on weaving synthetic fabrics.

Fiber Society Award

The Fiber Society has established an annual award for outstanding achievement by a young fiber scientist. An engraved scroll and $500 will be given by the society to the scientist for achievement completed before his 35th birthday. At the society's annual business meeting in Washington, Stanley Backer, associate professor of mechanical engineering, Massachusetts Institute of Technology, was elected president.

Dictionary of Textile Finishing

The internationally known German "Lexikon Textilveredlung" by C. H. Fischer-Bobsien is now available in a completely revised 2nd edition. The new volume contains almost twice as much text (more than 16,000 items) than the 1st edition, of which more than one third is technical information from over 40 foreign countries. Furthermore, it has as a new feature the explanations of many American, English and French technical terms. This makes the dictionary useful also for those who are only slightly familiar with German. There are over 500 Tables and Charts, and 135 Illustrations. Several thousand literature, book and magazine references add to the universal usefulness of this unique volume. The dictionary, over 1200 pages, 7x10 inch., clothbound, $30.00 per copy, may be ordered direct from the publisher C. H. Fischer-Bobsien, (21a) Dulmen-Daldrup 32, Westfalen, Germany.

C. W. Carvin, Jr., Joins Allied

The appointment of Charles W. Carvin, Jr. as vice president for fiber marketing for Allied Chemical's National Aniline Division, effective January 3, 1961, was announced last month by James G. Fox, Jr., division president. Carvin will be responsible for the merchandising and sale of Allied's

C. W. Carvin, Jr.

Caprolan nylon products. He was one of the founders of Charles W. Carvin Co., textile converters and acted in various capacities there. More recently he served as Director of Merchandising of Chemstrand Corp.

Dalton Leaving Tyrex

William Dalton, president of Tyrex, Inc., has resigned. His duties will be assumed by I. Rogosin, Tyrex board chairman, who is president of Beaunit Mills. Philip E. Robinson has been named secretary-manager of Tyrex, an association of rayon tire cord producers.

John E. Hargreaves

Heads Scott Testers Unit

John E. Hargreaves has been appointed president of Scott Testers (Southern), Inc., with offices in Spartanburg, S. C., it was announced by David C. Scott, Jr., president of Scott Testers, Inc., of Providence, R. I. Hargreaves succeeds James M. Scott, who died on June 19, 1960. Hargreaves joined the company in 1952.

Walter H. Schrader has been named manager of product development for Zantrel Polynosic rayon fiber by Hartford Fibres Co., Subsidiary of Bigelow-Sanford, Inc.

James N. McDonald has been appointed sales manager of American Cyanamid Co.'s Fiber Division.

Paul A. Merriam, a sales engineer representative for Riggs & Lombard, Inc., has retired after 25 years with the firm.

(Continued on Page 51)

Does YOUR warper have . . .

- **DENSITY CONTROL?**
- **UNIFORM SPEED CONTROL?**

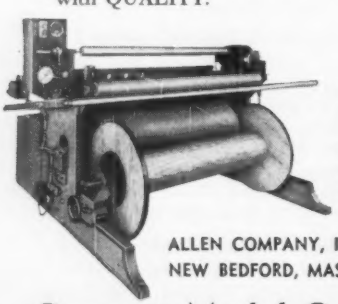
ALLEN MODEL "G", the modern warper with PATENTED HYDRAULIC CONTROL, gives you . . .

Uniform Density of Warp throughout entire build-up.

ALLEN PATENTED HYDRAULIC CONTROL maintains uniform pressure at all times between the beam surface and the pressor roll which drives the beam. The nip between this roll and beam is always at same distance and angle, so yarn tension is kept uniform. HARD-SHELL, SOFT-CENTER WARPS ARE POSITIVELY ELIMINATED.

Controlled Uniform Yarn Speed, variable at will.

ALLEN PATENTED HYDRAULIC CONTROL, maintains uniform pressure between beam surface and driving roll, assures positively uniform yarn speed—free from the abrupt jumps in speed experienced with now obsolete methods of constantly adjusting the drive speed in an endeavor to compensate for warp build-up. In addition, ALLEN VARIABLE SPEED DRIVE enables the operator to SELECT EXACTLY THE RIGHT SPEED FOR THE YARN BEING RUN. This means your ALLEN warper is always adjusted for MAXIMUM production consistent with QUALITY.



Don't put up with old-style warping!

Put this modern warper concept to work along with your other modern equipment. Time-proved, patented,—no other warper has these features.

ALLEN COMPANY, INC.
NEW BEDFORD, MASS., U.S.A.

Request Model G Brochure

ALLEN MODEL "G"
World's Most Advanced High Speed Warper

U. S. MAN-MADE FIBER PRICES

This schedule lists the prices of yarns, staple and tow as reported by the producers in January 1961. All prices are given to change without notice.

CELLULOSIC YARNS

ACETATE

American Viscose Corp.

Current Prices Effective March 22, 1960

Bright and Dull

Denier & Filaments	Intermediate Twist** Cones	Twister T-Tubes	Warps	Spinning Twist Cones & C-Tubes	Warps
40/11	$	$	$	$	$1.14
45/14					1.03
55/14-20	.99	.97	1.00	.93	.87*
75/18					.90
75/20	.95	.93	.96	.89	.90
100/28	.91	.89	.92	.85	.86
120/32	.82	.80	.83	.76	.77
150/36					.70
150/41	.74	.73	.75	.69	.70
200/54	.70	.69	.71	.66	.67
240/80				.65	.66
300/80	.66	.65	.67	.62	.63

* Tricot Spools Only.
** Standard Twist 2¢ Additional.
Terms: Net 30 Days.

Celanese Fibers Company

Current Prices Effective March 22, 1960

Acetate Filament Yarn Prices
Bright and Dull

Denier and Filaments	Intermediate Twist 4 & 6-Lb. Cones	Beams	4-Pound Cheeses	Spinning Twist Cones	Beams	O Twist Tubes
45/13	$1.12	$1.13	$	$	$1.03*	$ ....
55/15	.99	1.00	....	....	.87*	.82
75/20	.95	.96	....	.89	.90	.68
75/50	.97	.98	....	....	.92	....
100/26-40	.91	.92	....	.85	.86	....
120/40	.82	.83	....	.76	.77	....
150/40	.74	.75	.74	.69	.70	....
200/52	.70	.71	....	.66	.67	....
240/80	.68	....	....	.64	....	....
300/80	.66	.67	....	.62	.63	....
450/120	.66	.67	....	.62	.63	....
600/160	.65	.66	....	....	....	....
900/80-240	.63	.64	....	....	....	....

* Tricot beams only. This item with Permachem—$.05 additional.
3T/10 electrical finish available at no premium.

3 to 5 turns on Cones or Beams	$.02 Additional
Over 5 turns—55 denier	$.06 Additional per Turn
Over 5 turns—75 denier	$.04 Additional per Turn
Over 5 turns—100 denier	$.03 Additional per Turn
Over 5 turns—150 denier & coarser	$.02 Additional per Turn
150 Denier 12-TM Tubes	$.73
3 Pound Cheeses	$.01 Less than 4-lb. Cheeses
2-BU and 4-BU Tubes	Same price as 4 & 6-lb. cones
Premium for Serving Tubes	$.05
Part Cone Premiums: 2-lbs.	$.05
1-lb.	$.10
Under 1-lb.	$.20

Celaperm Filament Yarn Prices

Denier and Filaments	Intermediate Twist 4 & 6-Lb. Cones	Beams	Spinning Twist Cones	Beams
55/15	$1.37	$1.38	$1.31	$1.32
75/20	1.34	1.35	1.28	1.29
100/26	1.28	1.29	1.22	1.23
120/40	1.19	1.20	1.13	1.14
*150/40	1.11	1.12	1.06	1.07
200/104	1.05	1.06	1.01	1.02
300/80	1.01	1.02	.97	.98
450/120	.99	1.00	.95	.96
600/160	.97	.98	....	....
900/240	.94	....	....	....

* 150/2Z/40 available in all colors. Contact our District Sales Representative for current availability of colors in other denier.

Over 5 turns—55 denier	$.06 Additional per Turn
Over 5 turns—75 denier	$.04 Additional per Turn
Over 5 turns—100 denier	$.03 Additional per Turn
Over 5 turns—150 denier & coarser	$.02 Additional per Turn

Celaperm Black Yarn Prices

Effective March 22, 1960

Denier and Filaments	Intermediate Twist 4 & 6-Lb. Cones	Beams	Spinning Twist Cones	Beams
55/15	$1.17	$1.18	$1.11	$1.12
75/20	1.14	1.15	1.08	1.09
100/26	1.08	1.09	1.02	1.03
120/40	.99	1.00	.93	.94
150/40	.91	.92	.86	.87
200/52	.85	.86	.81	.82
300/80	.81	.82	.77	.78
450/120	.79	.80	.75	.76
600/160	.77	.78	....	....
900/80	.74	....	....	....

Terms: Net 30 days. Transportation prepaid or allowed to any destination in U.S.A.
Prices subject to change without notice.
All previous prices withdrawn.
Note: Prices on unlisted items can be obtained upon request.
Orders are subject to conditions of sale appearing on our Acknowledgments of Orders.

E. I. du Pont de Nemours & Co.

Textile Fibers Dept.
Current Prices

"Acele"* Acetate
Bright & Dull

Denier & Filament	Zero Twist Tubes	Beams	Low Twist Cones	Beams	Intermediate Twist 2 & 4 Lb. ⅝" Tbs.	4 & 6 Lb. Tw. Tbs.	Cones	Bms.
45-13	.94	1.02						
55-18	.82	.86					$.99	$1.00
55-24	.82	.86		.91			.99	1.00
75-24	.86	.89		.90		$.93	.95	.96
75-50				.92		.95	.97	.98
100-32	.82	.85		.86		.89	.91	.92
120-50	.73	.76		.77		.81	.82	.83
150-40	.66	.69	$.69	.70	.74	.74	.74	.75
200-60/64	.65		.66	.67	.70	.70	.70	.71
240-80			.65				.69	
300-80	.60	.62	.62	.63	.66	.66	.66	.67
450-120	.61		.62	.63	.66	.66	.66	.67
600-160			.62		.65		.65	.66
900-44					.63		.63	.64
900-240	.61**				.63		.63	.64
1800-88					.61		.61	.62
2700-132					.61		.61	.62
3000-210					.61		.61	.62

(A) Regular Twist (2.9 and 5 T.P.I.)—add $.02 to Intermediate Twist Price.
(B) 1 lb. ⅝" Tubes—add $.02 to 2 & 4 lb. ⅝" Tube Price.
** Bright only 2" Tubes.

Color-Sealed

Denier & Filament	Zero Twist Tubes	Beams	Low Twist Cones	Beams	Intermediate Twist Twisted Tubes 2 Lb.	4 & 6 Lb.	Cones	Beams
55-18	$1.245	$1.315***			$1.35	$1.35	$1.37	$1.38
75-24	1.18	1.28		1.29	1.32	1.32	1.34	1.35
100-32	1.14			1.23	1.26	1.26	1.28	1.29
150-40	1.03	1.06	1.06	1.07	1.10	1.11	1.11	1.12
200-64					1.04	1.05	1.05	1.06
300-80	.95	.97		.98	1.00	1.01	1.01	1.02

(A) Regular Twist—Add $.02 to Intermediate Twist Price.
*** Tricot only.

Black

Denier & Filament	Zero Twist Tubes	Beams	Low Twist Cones	Beams	Intermediate Twist 2 & 4 Lb. ⅝" Tbs.	4 & 6 Lb. Tw. Tbs.	Cones	Beams
55-18	1.045					$1.15	$1.17	$1.18
75-24	.98	1.08		$1.09		1.12	1.14	1.15
100-32	.94			1.03		1.06	1.08	1.09
150-40	.83	.86	.86	.87		.91	91	92
200-60						.85	.85	.86
300-80	.75	.77	.77	.78	.81	.81	.81	.82
450-120					.79	.79	.79	.80
600-160					.77	.77	.77	.78
900-240, 44					.74	.74	.74	.75

(A) Regular Twist (2.9 and 5 T.P.I.)—add $.02 to Int. Twist Price
(B) 1 lb. ⅝" Tubes—add $.02 to 2 & 4 lb. ⅝" Tube Price.

Specialty Yarns
Cycloset for Tricot

	Tubes	Beams
40-13 Natural	$1.07	$1.14
55-18/24 Natural	.83	.87
75-24 Natural	.87	.90
100-32 Natural	.83	.86
40-13 Black	$1.225	$1.295
55-18 Black	1.08	1.12

Thick & Thin

Denier & Filament	Natural Cones	Beams	Black Cones	Beams	Color-Sealed Cones
200-64 Int. Twist	$1.05	$	$1.15	$	$1.35
200-64 Reg. Twist	1.08	1.09	1.17	1.21	....

Terms: Net 30 days. Subject to changes without notice.
Domestic Freight Terms are F.O.B. shipping point, freight prepaid our route within the continental limits of the United States, excluding Alaska.
* Dupont's Trademark for its acetate yarn.

Eastman Chemical Products, Inc.

Tennessee Eastman Co.
Current

"Estron"* Yarn, Bright or Dull — White

Denier & Filament	Regular Twist Cones	Beams	Intermediate Twist Cones	Beams	Low Twist Cones	Beams	Zero Twist Tubes	Tricot Beams Spun Twist	Zero Twist
55/13	$1.01	$1.02	$0.99	$1.00	$0.93	$0.94	$0.82	$0.87	$0.86
75/19	.97	.98	.95	.96	.89	.90	....	.90	....
75/49	.99	1.00	.97	.98			....	....	....
100/25	.93	.94	.91	.92	.85	.86	....	....	....
120/30	.84	.85	.82	.83	.76	.77	....	....	....
150/38	.76	.77	.74	.75	.69	.70	.66	....	....
200/50	.72	.73	.70	.71	.66	.67	....	....	....

300/75	.68	.69	.66	.67	.62	.63	.60	....	....
450/114	.68	.69	.66	.67	.62	.63	....	....	....
600/156	.67	.68	.65	.66	.62	.63	....	....	....
900/230	.65	.66	.63	.64	....	....	.61	....	....
Heavier	....	....	....	....	....	....	.56	....	....

Current

"Chromspun"*—Standard Colors (Except Black)

Denier & Filament	Regular Twist Cones	Regular Twist Beams	Intermediate Twist Cones	Intermediate Twist Beams	Low Twist Cones	Low Twist Beams
55/13	$1.39	$1.40	$1.37	$1.38	$1.31	$1.32
75/19	1.36	1.37	1.34	1.35	1.28	1.29
100/25	1.30	1.31	1.28	1.29	1.22	1.23
150/38	....	....	1.11	1.12	1.06	1.07
300/75	....	....	1.01	1.02	.97	.98
450/114	....	....	.99	1.00	.95	.96
900/230	....	....	.94	.95	....	....

Current Prices

"Chromspun"*—Black

Denier & Filament	Regular Twist Cones	Intermediate Twist Cones	Intermediate Twist Beams	Low Twist Beams
55/13	$1.19	$1.17	$1.18	$1.12
75/19	1.16	1.14	1.15	1.09
100/25	1.10	1.08	1.09	1.03
150/38	.93	.91	.92	.87
200/50	.87	.85	.86	.82
300/75	.83	.81	.82	.78
450/114	.81	.79	.80	.76
900/230	.76	.74	.75	....

Prices are subject to change without notice.
Prices on special items quoted on request.
Terms: Net 30 days. Payment—U. S. A. dollars.
Transportation charges prepaid or allowed to destination in continental United States except Alaska. Seller reserves right to select route and method of shipment. If Buyer requests and Seller agrees to a route or method involving higher than lowest rate Buyer shall pay the excess of transportation cost and tax.

* "Estron" is a trade-mark of the Eastman Kodak Company.
* Chromspun is a trade-mark of the Eastman Kodak Company.

RAYON

American Bemberg

Current Prices

Regular Production Reel Spun Yarn

Den/Fil	No Turn Skeins	Turned* Skeins & Cones	8½ Turns	High Turn Skeins & Cones 12 Turns	15 Turns	18 Turns
40/30	$1.49	$1.95	....	....	....	$2.08
50/36	1.29	1.55	....	....	....	1.85
65/45	1.22	1.38	....	$1.61	....	1.66
75/60**	1.11	1.25	....	1.48	$1.53	1.56
100/74**	1.02	1.15	....	1.40	1.45	1.51
125/60	1.01	1.12	$1.16	1.37	....	....
150/120	.99	1.08	1.18	1.33	....	....
300/225	....	1.01	....	....	1.14	....
900/744	....	.91	....	....	....	....
1800/744	....	.91	....	....	....	....

* Turn includes twists up to 6 turns on 40 and 50 denier, and up to 5 turns on heavier deniers.
** Spun Dyed Cupracolor Black 15¢ per lb. extra.

"44" HH Spool Spun Yarn

Den/Fil	No Turn Tubes	No Turn Beams	5 Turn Beams	5 Turn Cones	12 Turn Beams	12 Turn Cones	15 Turn Cones
40/30	$1.35	$1.35	....	....	....	....	....
50/36	1.05	1.05	....	....	....	....	....
65/45	1.13	....	....	....	....	$1.50	....
75/45*	1.04	....	$1.15	$1.15	$1.38	1.38	$1.46
100/60*	.96	....	1.10	1.10	1.30	1.30	1.38
125/60	.91	....	1.06	1.06	....	....	....
150/90*	.83	....	.87	.87	1.21	1.21	1.30
150/120	.87	....	....	.99	....	....	....

* Available also in Spun Dyed Cupracolor Black at 15¢ per lb. extra.

"44" HH "Parfe" Spool Spun Yarn

Den/Fil	No Turn Cones	5 Turn Cones	5 Turn Beams	12 Turn Cones	15 Turn Cones
50/36	$1.60	$1.85	$1.85	....	....
75/45	1.48	1.58	1.58	1.78	1.88
100/60	1.38	1.48	1.48	1.68	1.78
150/90	1.21	1.28	1.28	1.63	1.73
300/120	1.21	1.28	....	....	....

Nub-Lite (Short Nubbi)

Code	Den/Fil	2½ Turn Natural Cones	2½ Turn Cones*	5 Turn Natural Cones	5 Turn Cones*
1515	160/90	....	....	$1.50	$1.40
1519**	155/90	....	....	1.50	1.40
2008	200/120	....	....	1.11	1.01
3002	315/180	$1.15	$1.05	....	....
4011	410/224	1.15	1.05	....	....
6001	600/360	1.13	1.03	....	....
8001	860/450	1.13	1.03	....	....

* Basic price for cones when dyed. Dyed Colors 30 and 35 cents above basic price. Prices based on 200 lb. dyed lots only. Prices for natural yarn skeins same as natural cone prices.
** Code 1519 can be run in warp or filling.

CUPIONI Type B

Code	Den/Fil	2½ Turn Cones
9650	70/45	$1.69
9660	100/60	1.53
1545	150/90	1.30
9730	285/135	1.15
9792	450/225	1.15
9814	600/372	1.12
9837	940/372	1.02

"Spun Dyed Cupracolor is spun 150, 285, and 940 deniers at 35¢ per pound extra. Cupracolor Black Comes in all deniers."

STRATA SLUB

Code	Den/Fil	Turned Cones	Price
9747	275/225	3½	$1.25
9798	450/372	2½	1.15
9823	600/372	2½	1.10
9847	960/372	2½	1.02
9885	1290/372	1½	1.00
9934	2680/744	1½	1.00

"Spun Dyed Cupracolor is spun in 600 and 960 deniers at 35¢ per pound extra."

FLAIKONA

Code	Den/Fil	Turned Cones	Price
9699	150/148	2½	$1.35
9769	300/224	2½	1.25
9782	450/270	2½	1.05
9809	600/360	2½	1.05
9840	900/450	2½	1.00
9924	2000/744	2½	.95

"Spun Dyed Cupracolor Black 35¢ per pound extra."
"Terms: Net 30 days, F.O.B. shipping point. Minimum freight allowed within the continental limits of the United States, excluding Alaska. Goods after shipment shall be at buyer's risk. Merchandise transported in seller's own trucks or those of its affiliates is sold F.O.B. delivery point. Prices are subject to change without notice."

American Enka Corp.

Current Prices
Effective February 29, 1960
Standard Quality Yarns

NATURAL

Den./Fil.	Luster	Turns		Weaving Cones	Weaving Beams	Skeins Long	Skeins Short	Cakes	Knitting Cones
50/18	E	5	S	....	....	....	....	....	1.63
50/20	B	4	S&Z	....	....	....	....	1.52	1.64
75/10	B	3	S&Z	....	....	....	....	1.02	....
75/18	E	4	S	....	....	....	....	....	1.14
75/30	B	2.5,4	S&Z	1.14	1.14	1.32	1.41	1.02	1.14
75/30	B	8	S	1.24	....	1.49	1.59	1.12	1.24
75/45	P,E	2.5,4,5	S&Z	1.14	1.14	1.32	1.41	1.02	1.14
75/60	B,P	3,4	Z	1.16	....	....	....	1.04	....
100/14	B	3	S&Z	....	....	1.15	1.23	.90	....
100/40	B,E	12	S&Z	....	....	....	....	....	1.29
100/40	B,P,E	4,5	S&Z	.98	....	....	....	.90	.98
100/40	B	6	S	1.17	....	1.34	1.44	1.09	....
100/40	B,P	2.5,4	S&Z	.98	.98	1.15	1.23	.90	....
100/60	B	4	S&Z	....	....	....	....	.90	....
100/60	E	2.5	S	1.00	1.00	....	....	.92	....
125/40	E	3	Z	....	....	....	....	.87	.90
125/50	B,P	3	S	.96	.96	....	....	....	....
150/40	B,E	0		.745	....	....	....	....	....
150/40	B,P,E	2.1,3	S&Z	.82	.82	.96	1.03	.78	.82
150/40	B,E	5	S&Z	.90	.90	1.15	1.25	.86	....
150/40	B,E	8	S&Z	.95	.95	1.20	1.30	.91	....
150/90	E	2.1	S&Z	.83	.83	....	....	.79	....
200/40	B	2.1	S	.81	.81	.94	1.01	.77	....
200/40	P	3	Z	....	....	.94	1.01	.77	.81
250/60	P,E	2.4	Z	....	....	.93	1.00	.77	.80
300/30	E	3	S	.81	.85	....	....	....	....
300/40	B	3.2	Z	.73	.76	....	....	....	....
300/50	B,E	3	S	.73	.76	....	....	....	....
300/60,120	B,P,E	2.1	S&Z	.73	.73	.82	.89	.71	.73
300/60	B	3.5	S	.73	.73	.82	.89	.71	....
300/60	B	6	S	.86	.86	....	1.00	.84	....
300/120H.T.	B	2.5	S	.75	.75	....	....	.73	....
300/40H.T.	B	3.4	Z	.85	....	....	....	.83	....
450/60	B	3	S	.69	.71	....	....	.67	....
450/80	B,E	3	S	.69	.71	.78	.85	.67	....
600/80	B,E	3	S	.73	.75	....	....	....	....
600/120	B,E	3	S	.69	.71	.78	.85	.67	....
900/120	B	3.4	S	.69	.71	.78	.85	.67	....
900/120H.T.	B	3.4	S	.71	.71	....	....	.69	....

B = Briglo
P = Periglo (Semi-Dull)
E = Englo (Dull)
H.T. = High Tenacity

Jetspun® (Colored Yarns)

Den./Fil.	Tenacity	Turns	Weaving Cones	Weaving Beams	Colors
100/40	Regular	2.5S	$1.35	$1.35	All
150/40	Regular	2.1S	1.17	1.17	All
200/40	Regular	8.0S	1.28	1.28	All
300/120	Regular	2.1S	1.09	1.09	All
450/80	Regular	3.0S	1.05	1.05	All
600/80	Regular	3.4S	1.04	1.04	All
300/40	High	3.4S	1.11	1.11	All
900/120	High	3.4S	1.06	1.06	All

® Registered Trade Mark for American Enka Solution-dyed Rayon Yarn.

Skyloft® (Lofted Rayon Filament Yarns) Natural and Jetspun®

Denier	Denier per Filament	Twist	Cones or Tubes Natural	Cones or Tubes Black	Cones or Tubes Other Colors
1000	7.5	3.4S	$.82	$1.05	$1.05
5300	15	3.0S&Z	.65	.75	.82

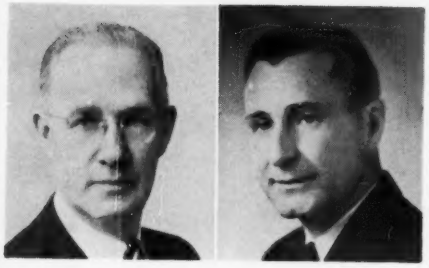
Registered Trademark for American Enka Texturized yarn.

American Viscose Corp.

Effective October 13, 1959

Graded Yarns

Denier	Filament	Type	Regular Turns Short Skeins	Long Skeins	Cones Tubes	Beams Spools	Cakes
75	10-30	Bright	$1.41	$1.32	$1.14	$1.14	$1.02
75	30	Dull	....	....	1.14	1.14	1.02
100	14-40	Bright	1.23	1.15	.98	.98	.90



Henry L. Ford L. K. Eilers

Henry L. Ford has been elected president of Eastman Chemical Products, Inc. He succeeds **Dr. L. K. Eilers,** who has become vice chairman of the board of directors.

Thomas J. Holman has been appointed an account executive in the Factoring Division of James Talcott, Inc. **Martin Rod** succeeds Holman as supervisor of the woolen and worsted section of the credit department.

Dan Duhl has joined the Mission Valley Division of Iselin-Jefferson Co., Inc., to merchandise sportswear fabric for the men's and boys' trade.

William N. Schwarze has been appointed sales engineer for Turbo Machine Co.

Leonard Hodes has been appointed assistant director of technical service for the Onyx Chemical Corp. **Conrad Hohing** has been named manager of the firm's Staten Island plant No. 2. **Louis S. Goldberg,** who has resigned as manager of marketing and advertising, will join the Buell Engineering Co. as director of marketing.

Earl S. Ebers has been designated as group vice president in charge of the polymer, fiber and chemical operations of United States Rubber Co. **Dudley Chittenden** succeeds Ebers as vice president and general manager of the firm's Naugatuck Chemical Division.

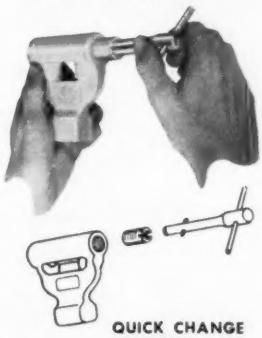
Charles T. Cooper has been appointed assistant superintendent of American Thread's Tallapoosa, Ga., mill. **Rex Fairchild** has been named assistant superintendent of finishing at the company's Willimantic, Conn., mills. **E. M. Diaz** succeeds Fairchild as a technical assistant in the operations division at the New York headquarters.

George R. McGrath has joined The Chemstrand Corp. as Acrilan carpet merchandiser. **W. A. Norman** has been promoted to manager of Acrilan technical sales service, and **Jay T. Badgley** has been appointed supervisor, personnel and training.

(Continued on Page 53)

NEW PLASTIC LOOM PICKER by GARLAND

EXCLUSIVE!



QUICK CHANGE BUSHINGS AND SPECIAL CHANGER TOOL. ONLY A FEW TURNS TO REMOVE AND REPLACE.

It's American made!
It costs less than imports!
It wears longer!
It gives higher efficiency... by test!
IT'S THE NEW GARLAND CUSTOM MOULDED HIGH DENSITY POLYETHYLENE REVERSIBLE DROP BOX PICKER, THAT YOU'VE BEEN HEARING SO MUCH ABOUT.

If you haven't seen, priced and tried this revolutionary plastic picker by Garland, write, wire or phone today.

If you don't, you'll miss out on a tremendous price and performance deal.

WRITE FOR COMPLETE INFORMATION

Garland MANUFACTURING CO.

Manufacturers of PLASTIC & RAWHIDE LOOM PICKERS • SPONGE LEATHER BUNTERS
LEATHER PRODUCTS • ROD LUBRICANT • NYLON AND RAWHIDE HAMMERS & MALLETS

74 WATER STREET • SACO • MAINE

100	60	Dull	....	....	1.00	1.00	.92
150	24-40	Bright	1.03	.96	.82	.82	.78
150	40	Semi-Dull	1.03	.96	.82	.82	.78
150	40	Dull	....	....	.82	.82	.78
150	90	Dull	....	....	.83	....	.79
200	10-44	Bright	1.01	.94	.81	.81	.77
250	60	Semi-Dull & Dull	1.00	.93	.80	.80	.77
300	15	Bright	....	.85	.78	.78	....
300	30	Dull Flat Filament	....	....	....	.85	....
300	44	Bright & Dull	.89	.82	.73	.73	.71
300	234	Dull	....	....	.83	....	.81
450	60-100	Bright	....	.78	.69	.71	.67
600	100	Bright & Dull	....	.78	.69	.71	.67
900	50-100-150	Bright	....	.78	.69	.71	.67
1200	75	Bright	....	.78	.69	.71	....
2700	150	Bright	....	.78	.69	.71	....

Extra Turns Per Inch

150	40	Bright	6-Turns	$1.25	$1.15	$ .90	$ .90	$ .88
200	44	Bright	6-Turns	....	1.05	.96	.96	....
300	15	Bright	5-Turns	....	....	.86	.86	....
300	44	Bright	4.3-Turns	....	....	.81	....	.79
300	44	Bright	6-Turns	.97	.90	.86	.86	.84
300	120	Rayflex	6-Turns	....	....	.93	.93	....
600	30	Bright	5-Turns	....	.86	.82	.82	.80

Rayflex Yarns

150	40-60	Rayflex	$	$	$ .85	$ .85	$ .81
200	75	Rayflex	....	....	.84	.84	.80
300	60-120	Rayflex	....	....	.75	.75	.73
450	120	Rayflex	....	....	.71	.71	.69
600	234	Rayflex	....	....	.71	.71	.69
900	350	Rayflex	....	.80	.71	.71	.69

Colorspun Yarns

Denier	Type	Cones/Tubes Beams/Spools
75	Regular Strength	$1.71
100	Regular Strength	1.35
150	Regular Strength	1.17
200	Regular Strength	1.14
300	Regular Strength	1.09
450	Regular Strength	1.05
600	Regular Strength	1.05
900	Regular Strength	1.05
300	High Strength	1.11
450	High Strength	1.06
900	High Strength	1.06
300	Regular Strength 5-Turns	1.19

Avicron Yarns

Avicron Yarns

Denier	Filament		Cones/Tubes Beams/Spools
1800	100-200	Singles & 2 Ply	$.61
2700	150-300-980	Singles & 2 Ply	.58
2700	980	Singles 5 TPI	.61

Viscose Filament Yarns

The following material deposit charges are required:

Metal Section Beams	$170.00 each
Metal Section Beam Racks	75.00 each
Metal Tricot Spools—14" flange	30.00 each
21" flange	60.00 each
32" flange	150.00 each
Metal Tricot Spool Racks—14" flange	135.00 each
21" flange	100.00 each
32" flange	75.00 each
Wooden Tricot Spool Crates	20.00 each
Cloth Cake Covers	.05 each

Same to be credited upon return in good condition—freight collect.

Celanese Fibers Company

Effective October 12, 1960

Viscose Rayon Filament Yarn Prices—Bright and Dull

Denier/Fil/Twist		Beams	Cones	Cakes
75/30/2Z		1.11		
75/30/3		1.11	1.10	.98
100/40/2Z		.97		
100/40/3		.97	.96	.88
100/40/5			1.02	.95
100/60/2Z	NS	.97	.96	
100/60/3			.98	.90
125/40/2Z		.95		
125/40/3		.95	.94	.87
150/40/0	NS		.74½	
150/40/2Z		.81		
150/40/3		.81	.79½	.76
150/40/5			.90	.86
150/40/8			.95	.91
150/40/10			.98	.94
150/90/0	NS		.77½	
250/60/0	NS		.74	
250/60/3			.80	.77
300/50/0	NS		.70	
300/50/2Z		.72		
300/50/3		.72	.70½	.69
450/60/0	NS	.68	.67	
450/60/3		.70	.69	

Terms: Net 30 days. Transportation prepaid or allowed to any destination in U. S. A.

Prices subject to change without notice.
All previous prices withdrawn.
Prices on unlisted items can be obtained upon request.
Orders are subject to conditions of sale appearing on our acknowledgments of orders.

E. I. du Pont de Nemours & Co.

Textile Fibers Dept. Current Prices

Effective October 11, 1960

Bright and Dull

Den.	Fil.	Turns/Inch Up to		Beams	Cones (A) Tubes	Cakes
40	20	3	Textile "Cordura"*		$1.97	$1.92
50	20	3	Textile "Cordura"		1.72	1.67
50	35	3	Textile "Cordura"		1.77	
75	30	3		$1.14	1.14	1.02
100	40	3	Bright	.98	.98	.90
100	60	3	Dull		1.00	.92
125	50	3		.96	.96	.87
150	40	3		.82	.82	.78
150	60	3	Bright	.82	.82	.78
150	60	3	Textile "Cordura"		.875	.845
150	90	3	Dull		.83	
150	100	3	Dull		.83	
300	50	2.5		.73	.73	.71
300	120	3	Textile "Cordura"	.74	.74	.72
450	72	3		.71	.69	.67
600	96	3	Bright	.71	.69	.67
600	240	3	Textile "Cordura"	.72	.70	
900	50	3	Bright	.71	.69	.67
900	144	3	Bright	.71	.69	.67
2700	150	3	Bright	.71	.69	

Thick and Thin

100	40	3	#7 Bright		1.42
150	90	3	#7 Bright		1.08
200	80	3	#7 Bright		1.08
450	100	3	#7 Bright		.92
1100	240	3	#60 Bright		1.03
2200	480	3	#60 Bright		.98

Plush

300	30	3	Dull	.85	.81

(A) 2¢/lb. additional for cones less than 3#.

Terms: Net 30 days.

Domestic Freight Terms are F.O.B. shipping point, freight prepaid our route within the continental limits of the United States, excluding Alaska.

* "CORDURA" and "SUPER CORDURA" are Du Pont's registered trade-marks for its high tenacity rayon yarn.

Industrial Rayon Corp.

Effective June 29, 1959

Continuous Process Textile Yarns

Denier	Filament	Turns per In.	Type	Beams	2.8# Cones	4.4# Cones and Tubes
150	40	2.5"S"	Dull	.82	.82	
150	40	2.5"S"	Bright	.82	.82	
200	20	2.5"S"	Bright	.81	.81	
300	44	2.5"S"	Bright	.73	.73	
450	60	2.0"S"	Bright	.69		.69
600	90	1.5"S"	Bright	.69		.69
900	50	2.0"S"	Bright	.69		.69
900	150	2.0"S"	Bright	.69		.69
1100	480	2.0"Z"	Bright extra strong	.66		.66

Lustre #4 is semi-dull.
Prices are subject to change without notice.

Strawn Monofilament

Denier	Filament	Turns per In.	Type	4.4# Cones	Spools and Tubes
450	1	0	Bright and Dull	1.00	1.05
450	1	2	Bright and Dull	1.00	1.05
1250	1	0	Bright and Dull	1.00	1.05
1250	1	2	Bright and Dull	1.00	1.05

Terms: Net 30 days f.o.b. point of shipment; title to pass to buyer on delivery of goods to carrier. Domestic transportation charges prepaid with transportation allowed at lowest published rate to all points in continental United States except Alaska.
Prices are subject to change without notice.

North American Rayon Corp.

Current Prices

Denier/Filament Normal Strength Yarns — NARCO	Twist	Knitting* Cones	No Twist Knitting Cones	Weaving Cones, Velvet Cones, Beams, Tubes**	Untreated Cakes
75/30	3.5			1.14	1.02
75/30	7			1.27	
75/30	12			1.35	
75/30	15			1.37	
75/30	20			1.40	
100/40/60	3.5			.98	.90
100/40	12			1.22	
125/25/60	3			.96	.87
125/52	10			1.13	

E. J. Chornyei

Ernest J. Chornyei has been elected president and chief executive officer of the Bradford Dyeing Association.

George A. Dorr, Jr., was elected chairman of the Wool Manufacturers Council of the Northern Textile Association. Elected to serve 3-year terms on the executive committee were: **William T. Dewey, John A. Morrill,** and **James K. Selden.**

Seabury Stanton was reelected chairman of the Northern Textile Association, with **William F. Sullivan** reelected president. Named as vice presidents were: **William H. Hubbard** and **Roger Grimwade.** Elected for 3-year terms as directors were: **Malcolm G. Chace, Jr., H. King Cummings, Saul Greenspan, Gordon Osborne,** and **Fulton Rindge, Jr.**

Charles K. Watson has been named sales and merchandising manager, Fibers Division, Beaunit Mills, Inc., with headquarters at Elizabethton, Tenn. **James C. Fortune** continues in charge of sales, advertising and promotion of Bemberg yarns, and **Richard I. DeVine** continues as sales manager of all viscose yarns for tires, industrial purposes and general textile uses.

Rodney C. Southworth has been appointed acting director of research for Draper Corp., filling the vacancy caused by the death of **Frederick M. Fitzgerald.**

Deaths

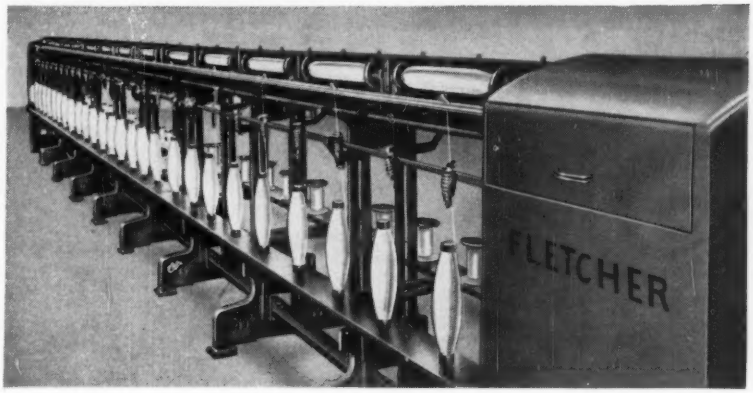
Henry A. Wells, 49, assistant district manager of Interchemical's Color & Chemicals Division, died November 7 in Rock Hill, S.C. He was a member of the American Association of Textile Chemists and Colorists and the American Association of Textile Technologists. He joined Interchemical Corp. in 1948.

Walter Larkin, 88, inventor of the first electronically-controlled seamless hosiery machine in 1954, died November 14 in Norristown, Pa. He was senior inventor at Singer-Fidelity, Inc. (formerly Fidelity Machine Co.) for the last 35 years.

FLETCHER

high speed WINDER REDRAW

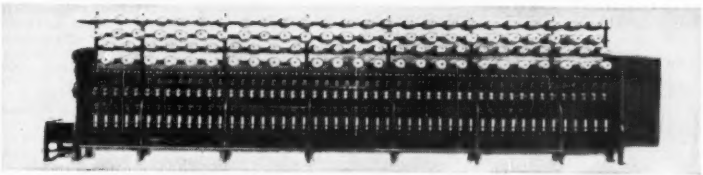
FOR GLASS AND SYNTHETIC YARNS



Here's the most modern redraw machine, Fletcher-engineered to give you top production.

- Vibration free operation
- Perfect wound bobbins at higher speeds
- Cleaner yarn because of no lubrication in the yarn area
- Three styles of bobbins, all sizes
- Higher speeds. 500 to 750 ypm on 2-pound bobbins.
- Pirns, bottle bobbins and Spools

TRY BEFORE YOU BUY with 3-month trial rental plan

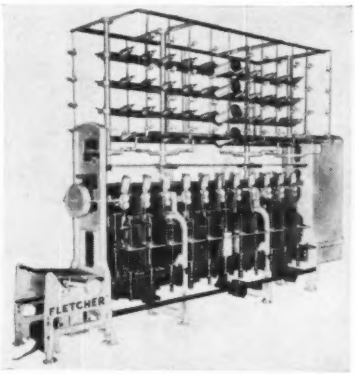


The MASTER DUPLEX *Unsurpassed for glass fibers*

New precision-built machine has speeds up to 9,000 rpm doubling, twisting and novelty for all yarns—glass, synthetic or natural.

FLETCHER BIG 6 POUND PACKAGE JUMBO DUPLEX DOUBLER TWISTER

Six pounds of continuous twisted and double high quality glass, textured, synthetic and cotton yarns. Bottle Bobbin, Straight or Tapered Pirn Package. 22-spindle and 72-spindle 6" ring. 9-inch and 10-inch traverse.



FLETCHER INDUSTRIES

Hasbrook Avenue and Beecher St., Cheltenham, Pa.

FLETCHER SOUTHERN — **SOUTHERN PINES, N. C.**

FLETCHER INDUSTRIES — **STATESVILLE, N. C.**

150/42	0		.74½		
150/42/60	3	.80½		.82	.78
300/75	0		.71		
300/75	3	.73		.73	.71
900/46	2.5	.69		.69	
1800/92	2.5	.69		.69	

* Oiled Cones $.01 per pound extra for Graded Yarns only.

** 1 lb. Tubes $.02 per pound extra for Graded Yarns only.

"Terms: Net 30 days, F.O.B. shipping point. Minimum freight allowed within the continental limits of the United States, excluding Alaska. Goods after shipment shall be at buyer's risk. Merchandise transported in seller's own trucks or those of its affiliates is sold F.O.B. delivery point. Prices are subject to change without notice."

TRIACETATE

Celanese Fibers Company

Current Prices

Arnel Yarn Prices
Bright & Dull

Effective August 19, 1958

Denier and Filaments	Cones	Beams	Thick and Thin Cones
55/LTDZ/15	$	$1.20	$ ....
55/2Z/15	1.32	....	....
75/LTDZ/20	....	1.16	....
75/2Z/20	1.21	1.22	....
100/2Z/26	1.14	1.15	....
150/2Z/40	.95	.96	....
200/2Z/40	....	....	....
200/2Z/52	.92	.93	1.25
300/2Z/80	.87	.88	1.23
450/2Z/120	.86	.87	....
600/2Z/160	.85	.86	1.21

3 to 5 Turns on Cones or Beams—$.02 Additional
Premium for Black Arnel—$.25 Per Pound
Premium for Navy Arnel—$.37 Per Pound

Terms: Net 30 days. Transportation prepaid or allowed to any destination in U.S.A.

Prices subject to change without notice.

All previous prices withdrawn.

Note: Prices on unlisted items can be obtained upon request.

Orders are subject to conditions of sale appearing on our Acknowledgments of Orders.

CELLULOSIC HIGH TENACITY YARN and FABRIC

American Enka Corp.

Effective October 17, 1960

Industrial Yarn Prices

Prices Subject To Change Without Notice

	Denier/Filament	Standard Beams	Standard Cones
TYREX (ENKA II)	1100/720	.55	57.5
	1650/1100	.49	51.5
	2200/1440	.48	50.5
	3300/2160	.48	50.5
TYREX FABRIC (ENKA II)	1100/740	*.67	
	1650/1100	*.58	
	2200/1440	*.57	
SUPRENKA M	1230/720	.55	57.5
	1600/1100	.51	53.5
	1800/1100	.49	51.5
	1870/1100	.49	51.5
	2200/1440	.48	50.5
	2400/1440	.48	50.5
	3300/1440	.48	50.5
	3300/2160	.48	50.5
	3650/2160	.48	50.5
SUPRENKA MS	1100/720	.55	57.5
	1650/1100	.49	51.5
	2200/1440	.48	50.5
	3300/2160	.48	50.5
TEMPRA—MECHANICAL AND CHAFER	1100/480	.54	56.5
	1230/480	.54	56.5
	1650/720	.48	50.5
	1820/720	.48	50.5
High & Low Elongation	2200/960	.47	49.5
	2400/960	.47	49.5
	3300/2160	.47	49.5
TEMPRA—SEWING YARN	1130/480 (5.0Z)	.58	.58
	1230/480	.60	.60
	1750/720	.50	.50
	1820/720	.49	.49
HIGH TENACITY	300/40, 300/120	.75	.75
	900/120	.71	.71
REGULAR TENACITY	100/40	.98	.98

* Effective December 1, 1960.

American Viscose Corp.

Effective Dec. 23, 1959

Tyrex*
Tyrex* Viscose Tire Yarn

Denier	Filament	Twist	Beams	Cones
1100	980	0	.55	.575
1100	980	Z	.55	....
1650	1500	0	.49	.515
1650	1500	Z	.49	....
2200	1500	0	.48	.505

Tire Fabric Made with Tyrex* Viscose Tire Yarn and Cord

Denier	Filament	Carcass	Top Ply	Breaker
1100	980/2	.67	.67	.67
		Factor Open-525	300-490	115-275
1650	1500/2	.58	.59	.615

Factor determined by dividing total ends by picks.

* Tyrex is a collective trade-make of Tyrex Inc. for Viscose Tire Yarn and Cord.

Rayon Tire Yarn
Yarn
High Strength

Denier	Filament	Twist	Unslashed Beams	Unslashed Cones	Slashed Beams	Slashed Cones
1100	490	0	....	....	.54	.565
1150	490	Z	.54	.565	....	....
1650	980	Z	.48	.505	....	....
1650	980	0	....	....	.48	.505
1875	980	Z	.48	.505	....	....
2200	980	0	....	....	.47	.495

Super "Rayflex"

Type 210						
1650	980	Z	....	....	.48	....
1875	980	Z	.48	.505	....	....
Type 120						
1800	1500	0	....	.515	....	....
3300	3000	0	....	....	.48	.505
4400	3000	0	....	....	.48	.505

Chafer Yarn

1100/490 High Strength	5Z Twist	.58	.58

Adhesive Dipped Yarn or Cord

.06 Premium

"Avisco" Bag Sewing Twine

Sold by The American Thread Company

Prices Effective June 21, 1960

1100/980 Super "Rayflex" 120	0-2Z	Cones	.62
1500/980 Super "Rayflex" 120	0-2Z	Cones	.57
1780/1500 Super "Rayflex" 120	0-2Z	Cones	.55

Also available in Red at 0.7 Premium.

All Yarns Sold "Not Guaranteed for Dyeing".

Tire Fabric

Denier	Filament	Type	Carcass Factor* Open-525	Top Ply 300-490	Breaker 115-275
1650	980/2	Super "Rayflex" 210	.57	.58	.605

* Factor determined by dividing total ends by picks.

Cord on cones in regular Tire Yarn twists same as fabric prices.

Other twist combinations—prices quoted on request.

Special packages take premiums indicated,

4.0 oz Wardwell Tubes	.20
10.5 oz Wardwell Tubes	.10
1.5 lb. Regular Braider Tubes	.06
3.5 lb. Tubes	.045

Single Yarn—Based on cone price.

Plied Yarn—Based on Fabric price.

The following deposit charges are made on invoices:

Beams	$55.00 each
Crates (Metal)	75.00 each
Fabric Shell Rolls	3.50 each

Same to be credited upon return in good condition—freight collect.

Rayon Tire Yarn and Fabric

Terms: Net 30 days. Seller to select and to pay transportation charges of common and contract carrier except when shipment moves West of the Mississippi River, in which event the actual cost of transportation to the Mississippi River crossing based on the lowest published freight rate, shall be allowed. Title to pass when merchandise is delivered to consignee. Transportation allowance based on lowest published volume rate shall be granted if merchandise is transported from shipping point in vehicle owned or leased and operated by buyer and title to pass when merchandise is delivered to same.

Price subject to change without notice.

Inferior Yarns (Designated HS-SR)	.06 Below First Quality Price
Skein Yarn	.04 Above First Quality Cone Price

"Avisco" Bag Twine

1-4# Cones	.05 Below First Quality List Price Only
4-10# Cones	.03 Below First Quality List Price Only
Adding 6 Turns to "0" Twist Yarn	.05

Celanese Fibers Company

Effective December 27, 1955

Fortisan Yarn Prices

Denier	Packages	Natural	Black
30/2.5/40	2 lb. Cones	$3.00 lb.	$3.35 lb.
60/2.5/80	4 " "	2.40 "	2.75 "
90/2.5/120	4 " "	2.25 "	2.60 "
120/2.5/160	4 " "	2.05 "	2.40 "
150/2.5/180	4 " "	1.95 "	2.30 "
270/2.5/360	4 " "	1.85 "	2.20 "
300/2.5/360	4 " "	1.85 "	2.20 "

Terms: Net 30 days. Shipments prepaid to any destination in U.S.A.

Prices subject to change without notice.

All previous prices withdrawn.

Prices on unlisted items can be obtained upon request.

Orders are subject to conditions of sale appearing on our acknowledgments of orders.

Fortisan-36 Rayon Yarn
Bright

Denier and Filament	Twist	4# cones	8# cones	Tubes	Beams
270/280	0.8Z	$2.30			
300/280	0.8Z	$2.05			
300/280	3Z	$2.20			
400/400	0.8Z	$1.75			$1.70
400/400	0			$1.75	
800/800	0.8Z	$1.25	$1.25		$1.20
800/800	3Z	$1.40			
800/800	0			$1.25	
1600/1600	0.8Z	$1.15	$1.15		$1.10
1600/1600	2½Z	$1.30			
1600/1600	0			$1.15	

Terms: Net 30 days. Shipments prepaid to any destination in U.S.A.

Prices subject to change without notice.

All previous prices withdrawn.

Prices on unlisted items can be obtained upon request.

Orders are subject to conditions of sale appearing on our acknowledgments of orders.

E. I. du Pont de Nemours & Co.

Textile Fibers Dept. Current Prices
Effective November 1, 1960

"Super Cordura"*

Den Fil	Turns/in	Beams	Cones
1100-720	2	.55	.575
1200-720	2		.575
1530-960	2		.570
1600-960	2		.535
1650-1100	2	.49	.515
1800-1100	2	.49	.515
2200-1440	2	.48	.505
2400-1440	2	.48	.505

Terms: Net 30 Days.

Domestic Freight Terms are F.O.B. shipping point, freight prepaid our route within the continental limits of the United States, excluding Alaska.

* "CORDURA" and "SUPER CORDURA" are DuPont's registered trade-marks for its high tenacity rayon yarn.

Industrial Rayon Corporation

Effective October 26, 1960

Unbleached Bright High Tenacity Yarns

Single End Beams and Cones—Type 100

Denier	Filament	Turns per Inch	Cones	Beams
1100	480	2.0 "Z"	.565	.54
1150	780	2.0 "Z"	.565	.54
1650	720	2.0 "Z"	.505	.48
1700	720	2.0 "Z"	.505	.48
2200	1000	2.0 "Z"	.495	.47
3300	1440	2.0 "Z"	.495	.47

Tyrex

Tyrex Certified Viscose Tire Yarn

Denier	Filament	Twist	Beams	Cones
1100	720	Z	.575	.55
1650	1100	Z	.515	.49

Terms: Net 30 days f.o.b. point of shipment, title to pass to buyer on delivery of goods to carrier. Domestic transportation charges allowed at lowest published rate to all points in continental United States except Alaska.

PRICES ARE SUBJECT TO CHANGE WITHOUT NOTICE.

North American Rayon Corporation

Current Prices

Super Super High Strength Continuous Yarn Type 710		Cones	Beams
1100/720	1.6Z	.55	.55
1650/720/1100	2.0Z	.49	.58
Tire Cord Fabrics			
Super Super High Strength Type 710			**Rolls**
1100/720			.67
1650/720			.58

Terms: Net 30 days, f.o.b. shipping point. Minimum freight allowed to consignee's nearest freight station East of the Mississippi River. To points West of the Mississippi River minimum freight to Memphis, Tenn. allowed. Goods after shipment shall be at buyer's risk. Merchandise transported in seller's own trucks or those of its affiliates is sold f.o.b. delivery point.

Prices are subject to change without notice.

CELLULOSIC STAPLE & TOW

ACETATE

Celanese Fibers Company

Effective March 2, 1959

Staple

(Most Deniers Available in Bright or Dull Luster)

Celanese Acetate Staple	
3, 5.5 & 8 Denier (Regular Crimp, Type HC, Type D)	$.36
2, 12 & 17 Denier (Regular Crimp, Type HC, Type D)	.37
35 Denier	.38
50 Denier	.40
Type F—5.5 & 8 Denier	.35
Type F—12 & 17 Denier	.36
Type K—(Available under Celanese License Agreement)	.39
5/8" to 7/8" length (All Deniers)	.03 (Premium)
35 Denier Flat Filament Acetate	.40
Non-Textile Acetate Fibers	.29*

Tow (Celatow)

3, 5.5 & 8 Denier	$.37
2, 12 & 17 Denier	.38
35 Denier	.40
35 Denier Flat Filament Acetate Tow	.42
50 Denier	.42

Terms: Net 30 days. Transportation prepaid or allowed to any destination in U.S.A. east of Mississippi River. Transportation prepaid to any U.S.A. destination west of Mississippi River, but charge is made for the portion of transportation from river crossing nearest customer's location.

Prices subject to change without notice.

All previous prices withdrawn.

* No transportation allowed (F.O.B. shipping point.)

Note: Prices on unlisted items can be obtained upon request.

Orders are subject to conditions of sale appearing on our acknowledgments of orders.

RAYON

American Viscose Corp.

Current Prices

Rayon Staple

	Bright and Dull
Regular	$ .28
"Viscose 22"	.28
1.25 Denier	.31
All Other Deniers	.28
Hi-Crimp	.28
Bleached Crimp	
1.5, 3.0 Denier	.315
Smooth	
8.0 & 15.0 Denier Smooth	.30
22.0 Denier	.32
Bleached	.33
Extra Strength	
0.75 Denier	.40
1.0 Denier	.35
XL	
1.0 Denier	.40
1.5, 3.0 Denier	.37
XLI	.34
Fiber 40	
1.0 Denier	.43
1.5 Denier	.40

Colorspun Black Staple

1.5, 3.0, 5.5 Denier	.37
15.0 Denier crimped	.40

Prices of other colors on request.

Tow

1.5, 3.0, 5.5 Denier	.35
9.0 Denier	.37
15.0, 20.0 Denier	.38
Color spun black tow	.42

Terms: Net 30 days.

American Enka Corp.

Current Prices Effective April 1, 1960

Rayon Staple

Regular Crimp

	Brt.	Dull
1.5 and 3 denier	$ .28	$ .28

High Crimp

4.5 denier	.28	...
6.5 denier	.28	.28
8 denier	.28	...
15 denier	.28	.28

Celanese Fibers Company

Effective May 1, 1959

Rayon Tow

	Bright & Dull
1.5, 3, 5.5 D.P.F. Total denier 200,000	.35
8 D.P.F. Total denier 207,000	.37

Terms: Net 30 days. Transportation prepaid or allowed to any destination in U.S.A. East of Mississippi River. Transportation prepaid to any U.S.A. destination West of Mississippi River, but charge is made for the portion of transportation from river crossing nearest customer's location.

Prices subject to change without notice.

All previous prices withdrawn.

Note: Prices on unlisted items can be obtained upon request.

Orders are subject to conditions of sale appearing on our Acknowledgments of Orders.

Courtaulds (Alabama) Inc.

Rayon Staple

	Bright	Dull
Regular Rayon Staple Fiber	$.28	$.28

Crimped Rayon Staple

High Crimped Rayon Staple Fiber	$.28	$.28

Coloray® Solution Dyed Rayon Staple

Color	Price per lb.
Black	$.37
Silver Grey	$.41
Mocha	$.41
Tan	$.41
Medium Brown	$.41
Aqua	$.42
Rose	$.42
Dawn Pink	$.42
Ecru	$.42
Dark Brown	$.42
Gold	$.45
Lilac	$.45
Slate Grey	$.45
Sulphur	$.46
Nugget	$.46
Light Blue	$.46
Crystal Blue	$.47
Apple Green	$.47
Sage	$.47
Peacock Blue	$.48
Medium Blue	$.50
Indian Yellow	$.51
Dark Blue	$.51
Hunter Green	$.51
Turquoise	$.52
Malachite Green	$.53
Red	$.58

In addition to the above, Black is also available in:

1½ den. 1⅛"	5½ den. 3"
3 den. 1⅛"	5½ den. 6"
3 den. 1-9/16"	

Terms: Net 30 days f.o.b. LeMoyne, Alabama: Minimum transportation allowed to points in U.S.A. east of Mississippi River.

Corval® Cross Linked Rayon

Man-made, cross-linked, regular or crimped cellulosic staple, semi-dull and dull ..... $.37 per lb.

Topel® Cross-Linked Rayon

Man-made, cross-linked, cellulosic staple, semi-dull and dull ..... $.37 per lb

Terms: Net 30 days f.o.b. LeMoyne, Alabama: Minimum transportation allowed to points in U.S.A. east of Mississippi River.

The Hartford Fibres Co.

Div. Bigelow-Sanford, Inc.

Rayon Staple

Effective October 20, 1960

Regular

1.5 & 3.0 denier Bright & Dull, 1-9/16", 2" .28

White (Crimped)

8 denier 3" Bright ..... .28
15 denier 3" Bright ..... .28
15 denier 3" Dull ..... .28

"KOLORBON"—Solution Dyed Rayon Staple—3" and 6"

	8 Denier Bright	15 Denier Dull	15 Denier Bright
Cloud Grey	.39	.39	....
Sandalwood	.39	.39	....
Nutria	.39	.39	....
Sea Green	.39	.39	....
Mint Green	.39	.39	....
Champagne	.39	.39	....
Midnight Black	.39	....	.39
Gold	.39	.39	....
Turquoise	.39	.39	....
Melon	.39	.39	....
Capri Blue	.39	.39	....
Charcoal Grey	.39	.39	....
Coco	.39	.39	....
Sable	.39	....	.39
Tangerine	.59	....	.59
Chinese Red	.59	....	.59
Larkspur Blue	.39	.39	....
Royal Blue	.59	....	.59
Lemon Peel	.48	.48	....
Kelly Green	.45	.45	....
Bitter Green	.59	....	.59
Brazil	....	.39	....
Redwood	....	....	.39
Frost Green	....	.39	....
Mist Grey	....	.39	....
Medium Brown	....	.39	....
Dark Brown	....	....	.39
Woodtone	....	.39	....
Antique Gold	....	.39	....
Light Turquoise	....	.39	....
Hunter Green	....	.39	....

Terms: Net 30 days. Prices are quoted f.o.b. shipping point, lowest cost of transportation allowed, or prepaid. To points West of the Mississippi, lowest cost of transportation allowed to the Mississippi River crossing.

"Zantrel Polynosic" Rayon

Effective August 14, 1959

Man-made, cellulosic staple.

Semi-Bright, 1 denier, 1 9/16" ..... $.50 per lb.
1½ denier, 1¼" and 1 9/16" ..... .47 per lb.
3 denier, 1 9/16" and 2" ..... .47 per lb.

Terms: Net 30 days. Prices are quoted f.o.b. shipping point, lowest cost of transportation allowed, or prepaid. To points West of the Mississippi, lowest cost of transportation allowed to the Mississippi River crossing.

North American Rayon Corporation

Current Prices

Rayon Staple

Super High Tenacity	Bright
No. 1 (Unshrunk)	
1, 1.5 & 2.3 deniers	.40
No. 2 (Preshrunk)	
1, 1.5 & 3 deniers	.40

Rayon Tow

High Tenacity	
2200/960	.52
2200/2000	.525
4400/2000	.475
4400/2934	.475
6000/2934	.425

TRIACETATE

Celanese Fibers Company

Current Prices Effective June 7, 1957

(Most Deniers Available in Bright or Dull Luster)

Arnel Staple and Tow

Arnel Triacetate Staple	Bright & Dull
2.5 Individual Denier	$.55
5.0 Individual Denier	.55
Arnel Triacetate Tow	
2.5 Individual Denier 114,000 Total Denier	$.60
5.0 Individual Denier 90,000 Total Denier or 180,000 Total Denier	.60

Packaged on Ball Warps

Terms: Net 30 days. Transportation prepaid or allowed to any destination in U.S.A. east of Mississippi River. Transportation prepaid to any U.S.A. destination west of Mississippi River, but charge is made for the portion of transportation from river crossing nearest customer's location.

Prices subject to change without notice.
All previous prices withdrawn.
Note: Prices on unlisted items can be obtained upon request.
Orders are subject to conditions of sale appearing on our acknowledgments of orders.

NON CELLULOSIC YARN

NYLON

Allied Chemical Corporation

Caprolan®

Current Yarn Prices: Effective May 1, 1960

Denier	Filament	Turn/In.	Twist	Type**	Package	1st Grade Price/Lb.
140	16	1½	Z	B	Cones*	$1.60
140	16	1½	Z	B	Beams	1.65
200	16	1½	Z	B	Cones*	1.49
200	16	1½	Z	B	Beams	1.54
200	32	¾	Z	B	Bobbins	1.49
200	32	¾	Z	B	Beams	1.54
210	32	1	Z	HB	Bobbins	1.49
260	16	1	Z	HB	Bobbins	1.49
420	64	½	Z	HBT	Bobbins	1.39
420	64	½	Z	HBT	Beams	1.44
520	32	1	Z	B	Bobbins	1.39
520	32	1	Z	B	Beams	1.44
840	136	½	Z	HBT	Al. Tubes	0.94
840	136	½	Z	HBT	Beams	0.92
1680	272	½	Z	HBT	Al. Tubes	0.94
1680	272	½	Z	HBT	Beams	0.92
1050	56	½	Z	B	Al. Tubes	1.15
2100	112	½	Z	B	Al. Tubes	1.11
4200	224	0	O	B	Paper Tubes*	1.10
2100	408	0	O	HB	Paper Tubes*	0.97
2500	408	0	O	HB	Paper Tubes*	0.97
3360	544	0	O	HB	Paper Tubes*	0.96
4200	680	0	O	HB	Paper Tubes*	0.96
5000	816	0	O	HB	Paper Tubes*	0.96
5800	952	0	O	HB	Paper Tubes*	0.96
7500	1224	0	O	HB	Paper Tubes*	0.95
10000	1632	0	O	HB	Paper Tubes*	0.95
15000	2448	0	O	HB	Paper Tubes*	0.95

Terms—Net 30 days.
Price subject to change without notice.
Bobbins are invoiced at 45¢ ea.
Aluminum Tubes are invoiced at 40¢ ea.
Beams are invoiced at $220.00.
Cradles for beams are invoiced at $53.00.
* Paper Tubes and Cones non-returnable, no charge.
** Type is used to describe luster and tenacity.
All prices quoted F.O.B. Shipping Point.
Minimum transportation charges allowed and prepaid in Continental United States, excluding Alaska.

B—Bright
H—High Tenacity
T—Heat Stabilized

American Enka Corporation

Enka Nylon Yarn Prices
Effective July 1, 1960

Den./Fil.	Luster*	Twist	Package	Price Per Pound Standard	Sub-Standard
15/1	SD or D	0.5 Z	Tricot Spools	4.00	....
15/1	SD or D	0.5 Z	Pirns-2 lb.	3.89	3.69
20/1	SD	0.5 Z	Pirns-1 lb.	4.03	3.68
20/6	D	0.5 Z	Pirns-2 lb.	2.96	2.61
20/6	D	0.5 Z	Tricot Spools	3.07	....
30/6	SD	0.5 Z	Pirns-2 lb.	2.36	2.21
40/8-13	SD	0.5 Z	Pirns-2 lb.	2.01	1.91
40/8-13	SD	0.5 Z	Tricot Spools	2.11	....
40/8	SD-B de B	0.5 Z	Pirns-2 lb.	2.10	2.00
40/13	D	0.5 Z	Pirns-2 lb.	2.06	1.96
40/13	D	0.5 Z	Tricot Spools	2.16	....
50/13	SD	0.5 Z	Pirns-2 lb.	1.91	1.76
50/13	SD-B de B	0.5 Z	Pirns-2 lb.	2.00	1.85
70/16-32	B-SD	0.5 Z	Pirns-2 lb.	1.71	1.66
70/32	SD-B de B	0.5 Z	Pirns-2 lb.	1.80	1.75
100/32	SD-B de B	0.5 Z	Pirns-2 lb.	1.74	1.69
100/32	SD	0.5 Z	Pirns-2 lb.	1.65	1.60
140/24-32-64	B-SD	0.5 Z	Pirns-2 lb.	1.60	1.55
140/32-64	SD-B de B	0.5 Z	Pirns-2 lb.	1.69	1.64
200/16-34	B	0.6 Z	Cones-4 lb.	1.49	1.44
200/16-34	B	0.6 Z	Beams	1.54	....
200/32	SD-B de B	0.5 Z	Cones-4 lb.	1.58	1.53
260/16-34	B	0.6 Z	Cones-4 lb.	1.49	1.39
400/68	B	0.6 Z	Cones-4 lb.	1.39	1.29
520/32	B	0.6 Z	Cones-4 lb.	1.39	1.29

*Luster: B—Bright; SD—Semi-Dull; D—Dull; *SD-B de B.

Pirns invoiced at 25¢ or 45¢ each, depending on type. Deposits refunded upon return of pirns in good condition. Cones are not returnable. Spools, Beams and Racks are deposit carriers and remain the property of American Enka Corporation.

Terms: Net 30 days from date of invoice. Minimum common carrier transportation charges will be prepaid and absorbed to first destination in the continental limits of the United States excluding Alaska and Hawaii. In prepaying transportation charges, seller reserves the right to select carrier used.

All prices subject to change without notice.

*B de B—Blanc de Blancs®—White of Whites Color.

The Chemstrand Corp.

Current Prices Effective August 11, 1960

Denier	Filament	Twist	Type	Package	Standard Price/Lb.	Second Price/Lb.
10	1	O	SD	Bobbins	$7.16	$6.56
15	1	O	SD	Bobbins	3.89	3.69
15	1	O	SD	Spools	4.00	....
15	1	O	Dull	Bobbins	3.89	3.69
15	1	O	Dull	Spools	4.00	....
20	7	Z	SD	Bobbins	2.91	2.61
20	7	Z	SD	Spools	3.02	....
30	10	Z	SD	Bobbins	2.36	2.21
30	26	Z	SD	Bobbins	2.49	2.21
40	10	Z	SD	Bobbins	2.01	1.91
40	13	Z	SD	Bobbins	2.01	1.91
40	13	Z	SD	Spools	2.11	....
40	13	Z	SD	Warp Wind	2.01	1.91

Cameo Curtains

(Continued from Page 38)

advertise Cameo curtains and carry basic Cameo stock. The program thus relieves the store from the need of stocking slow-moving styles and colors, enabling it to get its full markup by acting, not so much as a merchant on its own account, but as a "sales agent" for Cameo's full line. The firm thus takes on all the burden of maintaining inventory and getting the goods to the store literally *after* the sale to the customer has been made.

An enterprise so fast-moving and bristling with energy and fresh ideas as Cameo is an important customer for mills that weave curtain and drapery fabrics. Last year Cameo cut up some 12 million yards of 45 inch goods into the products it tailors to fit the windows of the land. Of this yardage about four million, Nathan Levinson estimates, were Dacron marquisettes. A big six million were glass fiber fabrics and the balance rayons, nylons and a fairly mixed bag of other constructions that go into Cameo's continually widening range of staple and novelty drapes.

Over the years Cameo's buying experience has jelled into a pattern of getting its fabrics largely from big weavers such as Stevens, Hathaway, Greenwood, and Hess, Goldsmith, although purchases from smaller outfits are made too. The Rosenbergs find it is best to keep their major lines fairly limited in variety so as to be able to maintain the large inventories that have proven good business for their firm. They like to buy from the big mills because they are assured of continuity of supply of the fabrics they want. And they find that the big outfits are more apt to give them the steady flow of high quality cloth which is crucial to Cameo in its continually stiffening practices of quality control as one means of assuring a steady improvement in the curtains it turns out.

Will Cameo Diversify?

Today, after 33 years of heartening growth both in dollar volume and even more significantly in the quality of its products, Cameo Curtains, in the cheerful confidence and energetic determination of its head men, the brothers Rosenberg, has just begun to move. The firm has been a leader in curtain manufacturing, in lifting a volatile, lightly capitalized, largely hand-to-mouth family subsistence trade up to the status of a major industry. In this rapid evolution of curtain manufacturing in the past 20 years Cameo has also, it is generally admitted by those familiar with the field, set the pace in upgrading the quality of ready-made curtains and draperies.

With all this behind them, Marvin and Bernard Rosenberg see even greater days ahead. For one thing, they realize that the maintenance of a quality brand name by heavy advertising for curtains and draperies alone is uneconomic. Hence they envisage a forward step for the firm that will see its line of products immensely broadened. It would be profitable, and relatively painless, they believe, to add bedspreads, pillows, slip covers. Marvin Rosenberg points out, for example, that many drapery fabrics can also be cut into bedspreads and slip covers. By the same token, such fabrics can be matched stylewise and color-coordinated with novelty pillows. With such possibilities for merchandising using the now well-established Cameo brand name, it would be foolish, he believes, for Cameo to limit itself in the future to curtains and draperies alone. ■

let's talk about...

LAUREL EMULSIONS

. . . first in conditioning and lubrication of *both* natural and synthetic yarns.

One of these—or another—Laurel Emulsion for natural and synthetic yarns will do a better job, with less work, at lower cost. There's one best emulsion in the Laurel Line to condition and lubricate any yarn . . . better.

LAUREL RUXITE A

. . . a quality lubricating and conditioning agent for cotton, wool, and synthetic spun yarns. Adaptable to rayon novelty yarns, it improves softness and running qualities. Forms highly stable emulsions with water.

• • •

LAUREL HYDROWAX HC

. . . especially prepared for tufting yarn producers. Restores rayon, cotton, or blended yarns to proper condition and imparts lubrication for better-running yarns. Easy to apply evenly, it's completely saponifiable for protection in scouring and dyeing.

• • •

LAUREL HYDROCOP and 3B SOFTNER

. . . first choice of knitting yarn manufacturers. Gives smooth running and even stitches, making for stronger yarn with fewer breaks. Causes no odor or color changes; easy to prepare; for natural or synthetic yarns.

• • •

LAURELWAX EMULSION WG

. . . truly cold water dispersible and excellent for winding trough work. For treating cotton, wool, Orlon and other knitting and sewing yarns, it is used at no sacrifice in active content where hot water is a problem.

Laurel Brand

OVER 50 YEARS OF SERVICE TO INDUSTRY

Laurel

SOAP MANUFACTURING CO., INC.

TIOGA, THOMPSON & ALMOND STS. • PHILA. 34, PA.

Warehouses: Paterson, N.J. Chattanooga, Tenn. Charlotte, N.C. Greenville, S.C.

40	13	O	SD	Draw Wind	2.01	1.91
40	13	Z	Dull	Bobbins	2.06	1.96
40	13	Z	Dull	Spools	2.16	....
40	13	O	Dull	Draw Wind	2.06	1.96
50	17	Z	SD	Bobbins	1.91	1.76
50	17	O	SD	Draw Wind	1.91	1.76
50	17	Z	Brt.	Warp Wind	1.91	1.76
70	20	Z	SD	Bobbins	1.71	1.66
70	34	Z	SD	Bobbins	1.71	1.66
70	34	O	SD	Draw Wind	1.71	1.66
70	34	Z	SD	Warp Wind	1.71	1.66
70	34	Z	Brt.	Bobbins	1.71	1.66
70	34	O	Brt.	Draw Wind	1.71	1.66
70	34	Z	Brt.	Warp Wind	1.71	1.66
70	34	Z	HB	Bobbins	1.76	1.66
70	34	O	HB	Draw Wind	1.76	1.66
90	26	Z	SD	Bobbins	1.76	1.66
100	26	Z	SD	Bobbins	1.65	1.60
100	34	Z	SD	Bobbins	1.65	1.60
100	34	Z	HB	Bobbins	1.70	1.60
140	68	Z	SD	Bobbins	1.60	1.55
140	68	Z	Brt.	Bobbins	1.60	1.55
200	34	Z	Brt.	Bobbins	1.49	1.44
200	34	O	Brt.	Draw Wind	1.49	1.44
200	34	Z	Brt.	Spools	1.54	....
200	68	Z	SD	Bobbins	1.56	1.46
210	34	Z	HB	Bobbins	1.49	1.44
210	34	O	HB	Draw Wind	1.49	1.44
210	34	Z	HB	Warp Wind	1.49	1.44
210	34	Z	HB	Spools	1.54	....
210	34	Z	HB	Beams	1.54	....
210	34	Z	RHB	Bobbins	1.59	1.44
260	17	Z	HB	Bobbins	1.49	1.39
260	17	Z	HB	Beams	1.54	....
420	68	Z	HB	Bobbins	1.39	1.29
520	34	Z	HB	Bobbins	1.39	1.29
720	140	Z	RHB	Tubes	1.04	1.01
720	140	Z	RHB	Beams	1.04	1.01
780	51	Z	HB	Tubes	1.39	1.29
840	140	Z	HB	Tubes	.94	.92
840	140	Z	HB	Beams	.92	....
840	140	Z	RHB	Tubes	.94	.92
840	140	Z	RHB	Beams	.92	....
1040	68	Z	SD	Tubes	1.15	1.05
1680	280	Z	HB	Beams	.92	....
1680	280	Z	RHB	Tubes	.94	.90
1680	280	Z	RHB	Beams	.92	....
1680	280	Z	RHB	Cones	.95	.91

* *Types*: D—Dull; SD—Semi-dull; B—Bright; H—High tenacity.

Bobbins are invoiced at 25¢ or 45¢, depending on type; tubes are invoiced at 40¢ each; spools invoiced at $95.00, $110.00, and $115.00, depending on type; and beams and crates for beams are invoiced at $220.00 and $25.00 respectively.

Prices subject to changes without notice.

Freight prepaid within Continental United States and Puerto Rico.

E. I. du Pont de Nemours & Co.

Textile Fibers Dept.

Current Prices

Nylon Yarn

Denier & Filament	Turns/Inch & Twist	Type	Package	1st Grade	2nd Grade
7-1	0	200	Bobbin	$8.05	$7.40
10-1	0	200	Bobbin	7.16	6.56
12-1	0	200	Bobbin	6.35	5.85
15-1	0	90	Bobbin	4.90	....
15-1	0	90	Beams	5.01	....
15-1	0	200	Beam	4.00	....
15-1	0	200/280	Bobbin	3.89	3.69
15-1	0	680	Beam	4.00	....
15-1	0	680	Bobbin	3.89	3.69
30-1	0	....	Bobbin	4.13	....
20-1	0	200/280	Bobbin	4.03	3.68
14-2	0.2Z	200	Bobbin	6.72	6.12
17-2	0.2Z	200	Bobbin	5.96	5.41
20-2	0.2Z	200	Bobbin	4.71	4.27
15-3	0.2Z	200	Bobbin	5.19	4.69
21-3	0.2Z	200	Bobbin	4.70	4.27
20-7	0.5Z	200	Bobbin	2.91	2.61
20-7	0.5Z	200	Beam	3.02	....
20-7	0.5Z	680	Bobbin	2.96	2.61
20-7	0.5Z	680	Beam	3.07	....
20-20	0.7Z	209	Bobbin	6.00	....
28-4	0.2Z	200	Bobbin	2.81	2.61
30-10	0.5Z	200	Bobbin	2.36	2.21
30-10	0.5Z	200	Tricot Bms	2.46	....
30-10	0.5Z	300	Bobbin	2.51	2.36
30-10	0.5Z	680	Bobbin	2.41	2.21
30-10	0.5Z	680	Tricot Bms.	2.51	....
30-26	0.5Z	200/280	Bobbin	2.49	2.21
30-26	0.5Z	200/280	Tricot Beams	2.59	....
40-7	0.5Z	200	Bobbin	2.11	1.91
40-10	0.5Z	200/280	Bobbin	2.01	1.91
40-10	0.5Z	200	Tricot Beams	2.11	....
40-13	0.5Z	200	Bobbin	2.01	1.91
40-13	0.5Z	200	Tricot Bms	2.11	....
40-13	0.5Z	400	Bobbin	2.13	1.90
40-13	0.5Z	680	Bobbin	2.06	1.96
40-13	0.5Z	680	Tricot Bms.	2.16	....
40-34	0.5Z	200	Bobbin	2.21	1.81
50-10	0.5Z	200	Bobbins	2.11	1.76
50-17	0.5Z	100/200	Bobbin	1.91	1.76
50-17	0	200	Tubes	1.91	1.76
50-17	0.5Z	680	Bobbin	2.01	1.76
60-34	0.5Z	300	Bobbin	1.86	1.76
60-20	0.5Z	200/280/288	Bobbin	1.82	1.65
70-17	0.5Z	200/288	Bobbin	1.71	1.66
70-34	0	100	Tubes	1.71	1.66
70-34	0.5Z	100/200	Bobbin	1.71	1.66
70-34	0	105/205	Paper Tube	1.71	1.66
70-34	0	200/285	Tubes	1.71	1.66
70-34	0.5Z	280	Bobbin	1.71	1.66
70-34	0.5Z	288	Bobbin	1.71	1.66
70-34	0.5Z	300	Bobbin	1.76	1.66
70-34	0.5Z	680	Bobbin	1.76	1.66
70-34	0	680	Tubes	1.76	1.66
80-26	0.5Z	200	Bobbin	1.71	1.60
90-26	0.5Z	200/288	Bobbin	1.76	1.66
100-34	0.5Z	200/288	Bobbin	1.65	1.60
100-34	0.5Z	300	Bobbin	1.70	1.60
100-34	0	300	Tubes	1.70	1.60
100-34	0.5Z	680	Bobbin	1.70	1.60
100-50	0.5Z	200/288	Bobbin	1.71	1.60
110-50	0.5Z	200	Bobbin	1.71	1.60
140-68	0.5Z	100	Bobbins	1.60	1.55
140-68	0	200	Tubes	1.60	1.55
140-68	0.5Z	200/288	Bobbin	1.60	1.55
140-68	0.5Z	300	Bobbin	1.65	1.55
200-20	1Z	100	Bobbin	1.49	1.44
200-34	0	100	Tubes	1.49	1.44
200-34	0.7Z	100	Bobbin	1.49	1.44
200-34	0	105	Tube	1.49	1.44
200-34	0.7Z	680	Bobbin	1.54	1.44
200-68	0.7Z	100/200	Bobbin	1.56	1.46
210-34	0	300	Tubes	1.49	1.44
210-34	0.7Z	300	Bobbin	1.49	1.44
210-34	0.7Z	300	Beam	1.54	....
210-34	0	305	Tube	1.49	1.44
210-34	0.7Z	300	Bobbin	1.59	1.44
260-17	1Z	300/380	Bobbin	1.49	1.39
400-68	0.7Z	100	Bobbin	1.39	1.29
420-68	1Z	300	Bobbin	1.39	1.29
420-68	1Z	300	Beams	1.44	....
520-34	1Z	300/380	Bobbin	1.39	1.29
630-102	0.7Z	300	Bobbin	1.39	1.29
780-51	1Z	300/380	Bobbin	1.39	1.29
800-140	0.5Z	100	Bobbin	1.39	1.29

Nylon Filament "Antron"* Yarn Prices

30-10	0.5Z	560 S.D.	Bobbin	2.46	2.31
40-13	0.5Z	560 Dull	Bobbin	2.16	2.06
40-13	0.5Z	560 S.D.	Bobbin	2.11	2.01
50-17	0.5Z	560 S.D.	Bobbin	2.01	1.86
70-34	0	565 S.D.	Paper Tube	1.81	1.76
70-34	0.5Z	560 S.D.	Bobbin	1.81	1.76
70-34	0	560 S.D.	DW Tube	1.81	1.76
200-20	0.7Z	560 Brt.	Bobbin	1.54	1.49
200-34	0.7Z	560 S.D.	Bobbin	1.54	1.49
200-34	0	565 S.D.	Paper Tube	1.54	1.49
520-34	1Z	560 Brt.	Bobbin	1.44	1.34
780-51	1Z	560 Brt.	Bobbin	1.44	1.34

* Antron is DuPont's trademark for its trilobal multifilament nylon yarn.

Color-Sealed Black Yarn

Denier & Filament	Turns/Inch & Twist	Type	Package	1st Grade	2nd Grade
30-10	0.5Z	140	Bobbin	$2.71	$2.56
40-13	0.5Z	140	Bobbin	2.36	2.16
70-34	0.5Z	140	Bobbin	2.06	2.01
100-34	0.5Z	140	Bobbin	2.00	1.95
200-20	0.7Z	140	Bobbin	1.84	1.79
200-34	0.7Z	140	Bobbin	1.84	1.79
260-20	1Z	140	Bobbin	1.84	1.79

Industrial Yarn

				Price/Lb.	
840-140	0.5Z	*707	Cone	.95	
5040-840	0	*707	Paper Tube	.99	
7560-1260	0	*707	Paper Tube	.98	
10080-1680	0	*707	Paper Tube	.98	
15120-2520	0	*707	Paper Tube	.98	

* Made for cordage use.

840-140	0.5Z	300/700	Raschel Beams	1.00	
840-140	0.5Z	300/700	Al. Tbs.	.94	.92
840-140	0.5Z	300/700	Beams	.92	....
1680-280	0.5Z	700	Al. Tbs.	.94	....
1680-280	0.5Z	700	Beams	.92	....
2520-420	0	700	Paper Tube	.97	
4200-700	0	700	Paper Tube	.96	
5040-840	0	700	Paper Tube	.96	
7560-1260	0	700	Paper Tube	.95	
10080-1680	0	700	Paper Tube	.95	
15120-2520	0	700	Paper Tube	.95	

These prices are subject to change without notice. Terms: Net 30 Days

Types

Type 90—Bright, normal tenacity, trilobal—cross section.
Type 100—Bright, normal tenacity.
Type 105—Bright, normal tenacity, low shrinkage (5-7%)
Type 140—Bright, color-sealed, black, normal tenacity.
Type 200—Semidull, normal tenacity.
Type 205—Semidull, normal tenacity, low shrinkage (5-7%)
Type 209—Semidull, normal tenacity, improved light durability and dye light fastness.
Type 280—Semidull, normal tenacity, improved light durability and dye light fastness.
Type 288—Semidull, normal tenacity, for Texturing.
Type 300—Bright, high tenacity.
Type 305—Bright, high tenacity, low shrinkage (5-7%)
Type 330—Bright, high tenacity, more heat & light resistant.
Type 380—Bright high tenacity, improved light durability and dye light fastness.
Type 400—Semidull, high tenacity.
Type 560—Luster as designated—Modified cross section.
Type 565—Luster as designated—Modified cross section, low shrinkage.
Type 680—Dull, normal tenacity.
Type 700—Bright, high tenacity.
Type 707—Bright, high tenacity cordage yarn.

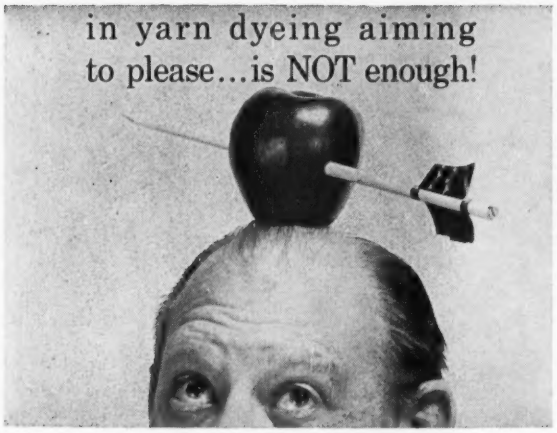
Freight Terms—Terms are F.O.B. shipping point, freight prepaid our route within the continental limits of the United States, excluding Alaska.

Following are invoiced as a separate item.
Bobbins—25 cents or 45 cents depending on type
Aluminum Tube—40¢ each
Draw Winder Tubes—$1.00
Industrial & Section Beams—$220.00 each
Racks for Industrial & Section Beams—$115.00 each
Tricot Beams—$95.00 or $250.00 each depending upon type
Racks for Tricot Beams—$70.00 or $130.00 each depending upon type
Raschel Beams—$85.00 or $100.00 each depending upon type
Racks for Raschel Beams—$70.00 each

Tricot and Raschel Beams are billed at the above prices if not returned within 90 days from date of invoice.

Section Beams are billed after 60 days, and Industrial Beams are billed after 60 days.

(Beams and Racks are deposit carriers and remain the property of E. I. du Pont de Nemours & Co., Inc.)



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Yarn Corporation

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PLANT: 86 CRARY ST., PROVIDENCE, R. I.

Stronger Tire Nylon Offered

A new nylon yarn for use in aircraft, auto and truck tires has been developed by Chemstrand Corp. Designated Chemstrand nylon Type FRN, the new yarn, according to Chemstrand spokesmen, surpasses other nylons now in use in fatigue resistance. According to laboratory and field tests conducted by Chemstrand, tires made with the new nylon showed an increase of more than 100% in the fatigue resistance factor as compared with nylon tires now commercially available. In the tests, over 500,000 miles were clocked on indoor wheel equipment and more than 750,000 miles on fleet vehicle trials of the new nylon in tires.

The test findings have encouraged Chemstrand technicians to believe that the increased fatigue resistance of Type FRN nylon tire cord will provide a higher percentage of tires suitable for retreading. The new yarn will not require changed methods of making nylon tires. Effective in December all shipments of 840 and 1680 denier nylon packages by Chemstrand carry the FRN designation.

Borg Outerwear Pile

A new series of deep pile fabrics made of 100% Creslan acrylic fiber pile has been added to the Borg line of outerwear pile fabrics. Developed cooperatively by the Fibers Division of American Cyanamid Co., producers of Creslan, and by the Borg Fabric Division, the fabrics have a range of pile heights with various levels of luster. The fabrics, with knitted back, are made on knitting machines. Designed for quality use, initially they will be shown as garment liners in basic price ranges. The fabrics will be available in widths up to 60 inches.

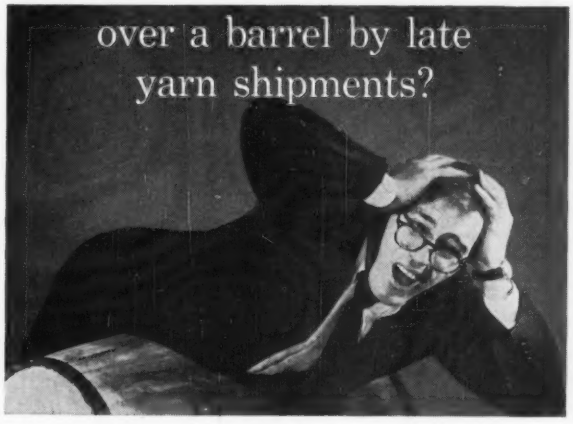
AATCC Papers (Continued from Page 26)

tual mill runs will be discussed and practical suggestions will be made for the dyer of cotton and rayon packages, especially for the man who always has trouble dyeing vats on packages, for the man who has continuous equipment, such as chemical pad-steam units or curing ranges, and the mill which dyes on the jig, for the dyer who has Smith Drum cascade machines, and for the man who dyes on the reel. The practicability of the dyeing from long liquor ratio will be discussed and it will be shown which dyes are suitable for this particular process.

In this connection also the effect of resins on the shade and light fastness will be discussed. While vinyl sulfone fiber reactive dyes are especially designed for the dyeing of cellulosic fibers, practical results from mill runs will be shown on man-made fibers, that is certain acrylic fibers, on mixtures of different acrylic fibers, on blends of wool, acrylic fibers and rayon, on blends of high tenacity rayon, nylon, and cotton, most of them in simple one bath procedures.

Du Pont Improves Blanket

A new development which improves performance and washability of blankets has been announced by Du Pont. The first blankets made as a result of this development—fiber-sealed 100% Orlon acrylic fiber blankets—were introduced this Fall by the Beacon Manufacturing Co. Extensive tests of the new fiber-sealed blankets are said to have demonstrated their exceptional washability, and their resistance to fuzzing, matting, pilling, and shrinking. Beacon is offering the blanket line in white and eight other colors, and in four sizes.



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POLYESTER

E. I. du Pont de Nemours & Co.

Textile Fibers Dept.

Current Prices

"Dacron"*

Denier & Filament	Turns/Inch	Luster	Type*	Package	Tubes 1st Gr.
30-14	0	Bright	55	Tube	$2.60
30-20	0	Semidull	56	Tube	2.60
40-27	0	Semidull	56	Tube	2.31
40-27	0	Bright	55	Tube	2.31
40-27	0	Dull	57	Tube	2.36
70-34	0	Semidull	56	Tube	1.91
70-14	0	Bright	55	Tube	1.91
70-34	0	Bright	55	Tube	1.91
70-34	0	Dull	57	Tube	1.96
100-34	0	Semidull	56	Tube	1.84
140-28	0	Bright	55	Tube	1.79
150-34	0	Semidull	56	Tube	1.79
220-50	0	Bright	51	Tube	1.76
250-50	0	Bright	55	Tube	1.76
1100-250	0	Bright	51	Cone	1.50
1100-250	0	Bright	52	Cone	1.50
1100-250	Ro2	Bright	52	Cone	1.50
1100-250	Ro2	Bright	52	Beam	1.52

Terms: Net 30 days.

Domestic Freight Terms are F.O.B. shipping point, freight prepaid our route within the Continental limits of the U. S., excluding Alaska.

Yarn Types

* Type:
Type 51—Bright, high tenacity.
Type 52—Bright, high tenacity.
Type 55—Bright, normal tenacity.
Type 56—Semidull, normal tenacity.
Type 57—Dull, normal tenacity.

Tubes are invoiced as a separate item at $.70 each.

Industrial beams and cradles are billed if not returned within 60 days from date of invoice. They are then billed as separate items at $220.00 per beam and $115.00 per cradle and are returnable for credit.

*"DACRON" is DuPont's registered trade-mark for its polyester fiber.

SARAN

The National Plastics Products Company—Fibers Division

Odenton, Maryland

Current Prices:

CONTINUOUS FILAMENT

Type	Twist p. i.	Natural	Colors
750/20*	3	1.75	1.80

* For filter fabrics and other industrial purposes only.

F.O.B. Odenton, Maryland.

Terms: Net 30 days.

NON CELLULOSIC STAPLE & TOW ACRYLIC

American Cyanamid Co.

Fibers Division

Effective Date: December 21, 1960

Cyanamid Acrylic Staple

	1st Grade Price (per pound)
2.0 Denier Bright and Semi-Dull	$1.28
3.0 Denier Bright and Semi-Dull	1.22
5.0 Denier Bright and Semi-Dull	1.22
15.0 Denier Bright, Semi-Dull and Dull	.95

Staple Lengths: 1½", 2" 2½", 3", 3½", 4", 4½".

Information provided on request for Deniers, Lengths and Lusters not listed above.

Prices are subject to change without notice.

Terms: Net 30 Days.

F.O.B. Shipping Point—Minimum transportation allowed (Seller's route and method) within the continental limits of the United States excluding Alaska. If Buyer requests and Seller agrees to a route or method involving higher than minimum rate, Buyer shall pay the excess transportation cost.

Note: CRESLAN® is Cyanamid's registered trademark for certain of its acrylic fibers. Use of this trademark is authorized only on properly constructed fabrics, after they have been tested and approved by Cyanamid.

The Chemstrand Corp.

Current Prices

Effective July 1, 1960

"Acrilan"*

	Acrilan	Acrilan 16
1.0 denier Semi-Dull and Bright staple		$1.28
2.0 denier Semi-Dull and Bright staple & tow	$1.18	1.18
2.5 denier Hi-Bulk Bright and Semi-dull staple and tow	1.18	1.18
3.0 denier Bright & Semi-dull staple & tow	1.18	1.18
5.0 denier Bright & Semi-dull staple & tow	1.18	1.18
8.0 denier Bright & Semi-dull staple & tow	1.18	1.18
15.0 denier Bright & Semi-dull staple & tow	.93	.97
2.5 denier Bright & Semi-dull staple —dope dyed (black)		1.48
3.0 denier Bright & Semi-dull staple & tow dope dyed (black)		1.48

Terms: Net 30 days. Freight prepaid within Continental U. S. & Puerto Rico.

* "Acrilan" is Chemstrand's registered trademark for its acrylic fiber.

The Dow Chemical Company

Textile Fibers Department Current Prices

"Zefran"* Acrylic Staple

2.0 denier Semidull & Bright—Staple only	$1.28
3.0 denier Semidull & Bright—Staple only	1.28
6.0 denier Semidull & Bright—Staple only	1.18
100% Blends of ZEFRAN acrylic fiber (For the Woolen System)	
Type W-2 (average denier of about 2.5)	$.99
Type W-4 (average denier of about 4.5)	.94

Terms: Net 30 days.

Transportation Terms: F.O.B. shipping point—Freight prepaid our route within the continental limits of the U. S., excluding Alaska.

* Registered trademark of The Dow Chemical Co.

E. I. du Pont de Nemours & Co.

Textile Fibers Dept. Current Prices

"Orlon"* Acrylic Staple & Tow

Type 42	Staple Length	Tow Blds.	1st Grade
1.0 Denier Semidull	1¼, 1½, 2, 2½, 3	420M	$1.28
2.0 Denier Semidull & Bright	1¼, 1½, 2, 2½, 3, 4½	470M	1.28
3.0 Denier Semidull & Bright	1¼, 1½, 2, 2½, 3, 4½	470M	1.30
3.0 Denier Color-sealed Black	1¼, 1½, 2, 2½, 3, 4½	470M	1.63
6.0 Denier Semidull & Bright	1½, 2, 2½, 3, 4½	470M	1.20
6.0 Denier Color-sealed Black	1½, 2, 2½, 3, 4½	470M	1.55
4.5 Denier Semidull	1½, 2, 2½, 3, 4½	470M	1.18
10.0 Denier Semidull & Bright	1½, 2, 2½, 3, 4½	470M	1.18
10.0 Denier Color-sealed Black	1½, 2, 2½, 3, 4½	470M	1.55

High Shrinkage Staple price as Regular Staple

Type 75 $1.08

This product is designed for *Cotton/Rayon System* Spinning and is 2.5 denier, 1½" semidull regular shrinkage staple.

Type 39 $.94

This product is designed for *woolen system spinning* and is a blend of deniers (average 4.2) with a variable cut length.

Type 39A $.99

This product is designed for *woolen system spinning* and is a blend of predominately fine deniers (average 2.4) with a variable cut length.

Type 39B $.94

This product is designed for *woolen system spinning* and is a blend of predominately heavy deniers (average 6.5) with a variable cut length.

"ORLON SAYELLE"**

Type 21

3.0 denier semidull variable (2½" to 5" average 3¾") staple $1.45

6.0 denier semidull variable (2½" to 5" average 3¾") staple 1.40

F.O.B. Shipping Point—Freight prepaid our route within the continental limits of the United States, excluding Alaska.

*"ORLON" is Dupont's Registered Trade-mark for its Acrylic Fiber.

"ORLON SAYELLE"** is Dupont's Registered Trade-mark for its bi-component Acrylic fiber.

MODACRYLIC

Eastman Chemical Products, Inc.

Tennessee Eastman Co.

Current

"Verel"* Staple and Tow

Deniers	Dull and Bright
2 and 3	$1.02 per pound
5, 8, and 12	.92
16 and 20	.88
24 denier	.93

Prices are subject to change without notice.

Terms: Net 30 days. Payment—U. S. A. dollars.

Transportation charges prepaid or allowed to destination in continental United States, except Alaska. Seller reserves right to select route and method of shipment. If Buyer requests and Seller agrees to a route or method involving higher than lowest rate Buyer shall pay the excess of transportation cost and tax.

* "Verel" is a trade-mark of the Eastman Kodak Co.

Union Carbide Chemicals Co.

Div. Union Carbide Corp

Textile Fibers Dept. Effective December 1, 1959

Dynel Staple & Tow

Natural Dynel	
2, 3, 6, 12 Denier, Staple and Tow	1.10 per lb.
Liner blend, Staple only	.92 per lb.
24 Denier, Staple and Tow	1.05 per lb.
12 Denier, Type 80, Staple and Tow	.85 per lb.
3 Denier Type 63, High Shrinkage, Staple and Tow	1.15 per lb.
Dynel Spun with Colors: Blond, Pewter, Gray, Brown, Charcoal, Black	
3 and 6 Denier, Staple and Tow	1.20 per lb.
3 Denier Type 63, High Shrinkage, Staple and Tow	1.30 per lb.

Prices are quoted F.O.B. shipping point, freight prepaid our route, within continental limits United States, excluding Alaska and Hawaii.

NYLON

E. I. du Pont de Nemours & Co.

Textile Fibers Dept. Current Prices

Nylon Staple and Tow

Denier	Type	Staple Lengths	Tow Bundle	1st. Grade Price/Lb.	2nd Grade Staple Only
1.5	200	1½"—4½"	None made	$1.33	$1.18
1.5	201	1½"—4½"	None made	1.35	1.20
2.3	420	1½" only	None made	1.28	1.13
3.0	100/200	1½"—4½"	430M	1.28	1.13
3.0	101/201	1½"—4½"	455M	1.30	1.15
6.0	100	1½"—6½"	330M	1.28	1.13
6.0	101	1½"—6½"	345M	1.30	1.15
15.0	100	1½"—6½"	425M	1.08	....

15.0	101	1½"—6½"	None made	1.10	....
15.0	600	1½"—6½"	425M	1.10	....
15.0	601	1½"—6½"	None made	1.12	....

Staple lengths are restricted to the range shown opposite each denier above. The actual cut lengths within these ranges are as follows:

1⅛, 1½, 2, 2½, 3, 4½ and 6½

Types

Type 100 Bright, normal tenacity, not heatset.
Type 101 Bright, normal tenacity, heatset.
Type 200 Semidull, normal tenacity, not heatset.
Type 201 Semidull, normal tenacity, heatset
Type 420 Semidull, high tenacity, high modulus, no crimp.
Type 600 Dull normal tenacity, not heatset.
Type 601 Dull normal tenacity, heatset.
These prices are subject to changes without notice.
Terms—Net 30 Days.
Freight Terms—Terms are F.O.B. shipping point, freight prepaid our route within the continental limits of the United States, excluding Alaska.

NYTRIL

Celanese Fibers Company

DARVAN

Effective Nov. 21, 1958

Type	Price Per Pound Not Crimp Set	Crimp Set
3, 4½ and 6 Denier	$1.45	$1.50
1½, 2 Denier	$1.50	$1.55

Pack in 100 Lb. and 500 Lb. Bales, Net
Staple lengths 1½, 2, 3, 4½
Tow—90,000 Total Denier
Bright, Semi-dull, Dull

(Deniers and lengths of staple not listed above are available upon special request.)

Terms: Net 30 Days.
F.O.B. Shipping Point (Avon Lake, Ohio) Minimum freight prepaid our route to points east of the Mississippi River within the continental limits of the United States, for points west of the Mississippi River freight allowed to the Mississippi River crossing nearest purchaser's mill if overland, or port of exit of purchaser's choice east of the Mississippi River.

OLEFIN

Beaunit Mills Inc.

Fibers Division Effective November 1, 1960

Polypropylene Bright Staple

Denier	Price per lb.
1.5	$.90
3.0	.90
6.0	.90
15.0	.90

Staple cuts are 1½", 2" and 3".
Other lengths are available on request.

Terms: Net 30 days F.O.B. shipping point. Minimum Freight allowed within the continental limits of the United States, excluding Alaska. Goods after shipment shall be at buyer's risk. Merchandise transported in seller's own trucks or those of its affiliates is sold F.O.B. delivery point. Prices subject to change without further notice.

POLYESTER

Beaunit Mills Inc.

Vycron Polyester

Current Prices

	Denier	Price Per Lb.
	1.5	$1.00
	3.0	1.00
Staple Cuts are 1⅛" to 6".		
Tow for Converters	1.5	1.00
(Tow Bundle 200,000 Denier)	3.0	1.00

Spun Dyed Black 15¢ per lb. extra.

"Terms: Net 30 days, F.O.B. shipping point. Minimum freight allowed within the continental limits of the United States, excluding Alaska. Goods after shipment shall be at buyer's risk. Merchandise transported in seller's own trucks or those of its affiliates is sold F.O.B. delivery point. Prices are subject to change without notice."

E. I. du Pont de Nemours & Co.

Textile Fibers Dept. Current Prices

"Dacron"** Staple and Tow

Denier	Luster	Type*	Length	Tow Bundle	1st Gr.
1.5	Semidull	54	1¼"-1½"	None made	1.26
2.25	Semidull	64	1¼"-4½"	450M	1.41
3.0	Semidull	54	1¼"-4½"	450M	1.36
3.0	Semidull	61	1¼"-4½"	None made	1.36
3.0	Semidull	64	1¼"-4½"	450M	1.41
4.5	Semidull	54	1¼"-4½"	450M	1.31
4.5	Semidull	64	1¼"-4½"	450M	1.36
6.0	Semidull	54	1¼"-4½"	450M	1.31
6.0	Semidull	61	1¼"-4½"	None made	1.31
6.0	Semidull	64	1¼"-4½"	450M	1.36

* Type:
Type 54—Semidull, Normal Tenacity.
Type 61—Industrial Staple having 45% Shrinkage. Not intended for Dyeable Uses.
Type 64—More Pill Resistant Staple, with Greater Dyeing Versatility.

"Dacron" Polyester Color-Sealed Black Staple and Tow

2.25	Color Sealed Black	64	1¼"-4½"	450M	1.76
3.0	Color Sealed Black	64	1¼"-4½"	450M	1.76

F. O. B. Shipping Point—Freight prepaid our route within the continental limits of the United States, excluding Alaska.
** Dupont's Registered Trade-mark for its Polyester Fiber.

Eastman Chemical Products, Inc.

Tennessee Eastman Co. Current

"Kodel"*

Deniers	Semi-Dull Staple	Tow	Staple and Tow Black	Brown	Blue
1.5	$1.33	$1.41	....	....	....
2.25	1.41	1.41	$1.76	....	....
3.0	1.41	1.41	1.76	$1.86	$1.96
4.5	1.36	1.36	....	....	....

Terms: Net 30 days. Payment—U. S. A. dollars.
Transportation charges prepaid or allowed to destination in continental United States, except Alaska. Seller reserves right to select route and method of shipment. If Buyer requests and Seller agrees to a route or method involving higher than lowest rate Buyer shall pay the excess of transportation cost and tax.
* "Kodel" is a trade-mark of the Eastman Kodak Company.

Celanese Fibers Company

Current Prices Effective June 10, 1960

Fortrel Polyester Staple and Tow

Staple

Denier	Luster	Price
1.5	Semi-dull	$1.26
3	Semi-dull	1.36
4.5	Semi-dull	1.31
6	Semi-dull	1.31

Staple lengths 1½", 2" and 3".
All staple packaged in 500 pound bales.

Tow

Denier	Luster	Price
1.5	Semi-dull	$1.36
3	Semi-dull	1.36
4.5	Semi-dull	1.31
6	Semi-dull	1.31

Total denier of all tow is 225,000.
All tow packaged in 300 to 400 pound cartons.
TERMS: Net 30 days. F.O.B. destination—Freight prepaid our route within the continental limits of the United States, excluding Alaska. Prices subject to change without notice.

VINYON

American Viscose Corp. Effective October 1, 1956

Avisco Vinyon Staple

1.5 denier 1½" Unopened	$.90 per lb.
3.0 denier 1½" Unopened	.80 per lb.
3.0 denier 1¼" Unopened	.80 per lb.
3.0 denier 1¼" Opened	.90 per lb.
3.0 denier 2" Opened	.90 per lb.
5.5 denier 1" Opened	.90 per lb.
5.5 denier 1½" Unopened	.80 per lb.

Terms: Net 30 days.

SARAN

The National Plastics Products Company—Fibers Division
Odenton, Maryland

Current Prices: Saran Staple

Type	Denier	Natural	Colors
2Y—Upholstery	22	$0.70	$0.75
2Y—Upholstery	16	.74	.79
3Q—Industrial Fabrics	22	.68	.72
1C—Carpets	22	.68	.72
1M—Mops	22	.68	.72

In any staple length 1¼ to 6". Also 45 denier, 7" cut.
F.O.B. Odenton, Maryland.
Terms: net 30 days.

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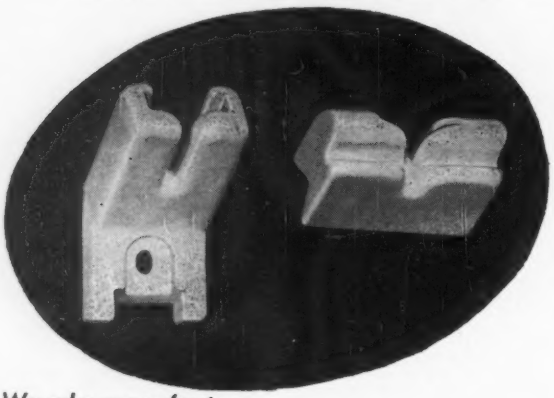
when you think you've got it you've lost it.



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ALLENTOWN **PENNSYLVANIA**

Whitin Machine Sales

The J. P. Stevens Co. has signed purchase agreements with the Whitin Machine Works covering the installation of 96 new model N standard spinning frames as part of the mill modernization program being undertaken at the Stevens' Whitmire, S. C., plant. The new frames, 27-inches wide, 320 spindles in length and 3-inch gauge, will be installed 5 to a bay, using less floor space than the machines being replaced. They operate at high speeds on the production of finer count yarns ranging from 30's to 100's. Delivery to the Whitmire plant is scheduled to begin early in 1961.

Whitin also announced the sale of 6 new model M62 Even-Draft drawing frames, 4 deliveries each, to the Bates Manufacturing Co., Edwards Division, Augusta Me., and the sale of 12 model KW American system Piedmont spinning frames to Sheble & Wood Yarn Corp., Salamanca, N. Y.

New Urethane Foam Plant

Ground has been broken by Nopco Chemical Co. for the construction of a modern polyether urethane foam plant at Chattanooga, Tenn. Covering approximately 70,000 square feet, with a design capacity of 4 million pounds a year, the new plant is expected to be in operation by March 30, 1961. In another move to strengthen its position in the urethane foam industry and to broaden its position in the chemical field, Nopco recently announced plans to construct a plant in New Jersey for the production of isocyanates. The major production item will be toluene diisocyanate (TDI), the basic raw material for Nopco's urethane foams. The New Jersey plant should go on stream in January, 1962.

New White Chromspun

Eastman Chemical Products has announced a blue-white solution dyed acetate, "Diamond-White" Chromspun 332, developed especially for bridal wear fabrics. Chromspun 332 is said to eliminate the extra processing formerly required to achieve this shade for stains, peaus, and taffetas. Available in 100, 150 and 300 deniers, the new Eastman product is expected to have wide application in party dresses, swimwear, knits, foundations, blouses and lounge wear.

Alatia Pile Fabric Coats

"Alatia" deep pile coats introduced by Lou Nierenberg Corp., are said to resemble the high-lows and shading of costly let-out animal skin. They retail from $135 to $160. Alatia was developed by Nierenberg in cooperation with Alamac Knitting Mills through use of a special electronic process for treating Alamac's two-height pile fabric of Dynel and Verel modacrylic fibers. For Spring 1961, Nierenberg stylists are preparing a full line of stoles and short pieces.

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Norwegian Viscose Rayon Staple Fiber

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A new supply of the "DESKBOOK OF MANMADE FIBER FACTS", now available.

We regret that we were unable to supply everyone who ordered the DESKBOOK, which appeared in our September issue, because of the large orders, which far exceeded our expectations. A new supply was printed and are now available. The reprints are 50 cents each with a discount of 20% for orders of 25 or more. Orders originating in New York City must add to the price the amount of the 3% city sales tax.

Calendar of Coming Events

Jan. 4—AATT monthly meeting. Della Robbia Room, Hotel Vanderbilt, New York, N. Y.
Jan. 11-13—Cotton Production Mechanization Conference sponsored by the National Cotton Council. Poinsett Hotel, Greenville, S. C.
Jan. 16-19—Instrument Society of America conference and exhibit. Sheraton-Jefferson Hotel and Kiel Auditorium, St. Louis, Mo.
Jan. 21—AATCC Piedmont Section. Poinsett Hotel, Greenville, S. C.
Feb. 7-9—2nd Canadian Textile Conference sponsored by Textile Technical Federation of Canada and Primary Textiles Institute. Queen Elizabeth Hotel, Montreal, Que.
Feb. 8—AATT annual meeting. Hotel Commodore, New York, N. Y.
Feb. 16-17—American Society for Quality Control Textile and Needle Trades Division annual conference. Robert E. Lee Hotel, Winston-Salem, N. C.
Mar. 20-22—American Physical Society meeting. Monterey, Calif.
Mar. 1—AATT monthly meeting. Della Robbia Room, Hotel Vanderbilt, New York, N. Y.
Mar. 21-23—High-Polymer Physics Div., American Physical Society meeting. Monterey, Calif.
Mar. 23-25—ACMI annual meeting. Fontainebleau Hotel, Miami Beach, Fla.
Apr. 5—AATT monthly meeting. Della Robbia Room, Hotel Vanderbilt, New York, N. Y.
Apr. 12-14—Alabama Textile Manufacturers Association annual meeting. Buena Vista Hotel, Biloxi, Miss.
Apr. 16-18—Narrow Fabrics Institute spring meeting. The Tides Inn, Irvington, Va.
Apr. 18-19—Technical Advisory Committee and Board of Trustees meeting. Institute of Textile Technology, Charlottesville, Va.
Apr. 23—Georgia Textile Operating Executives spring meeting. Hightower Building, Georgia Institute of Technology, Atlanta, Ga.
Apr. 24-25—Underwear Institute annual meeting. Hotel Dennis, Atlantic City, N. J.
Apr. 24-28—Knitting Arts Exhibition. Auditorium, Atlantic City, N. J.
Apr. 26-29—Georgia Textile Manufacturers Association annual meeting. Hollywood Beach Hotel, Hollywood, Fla.
May 3—AATT monthly meeting. Della Robbia Room, Hotel Vanderbilt, New York, N. Y.
Jun. 5-8—ISA Summer Instrument-Automation conference and exhibit. Toronto, Canada.
Jun. 5-9—Society of the Plastics Industry annual national conference and exposition. Commodore Hotel and Coliseum, New York, N. Y.
Jun. 7—AATT monthly meeting. Della Robbia Room, Hotel Vanderbilt, New York, N. Y.
Jul. 27-Aug. 1—IUPAC International Symposium on Macromolecular Chemistry. Queen Elizabeth Hotel, Montreal, Canada.
Nov. 13-15—Narrow Fabrics Institute, Inc. meeting. Statler-Hilton, New York, N. Y.

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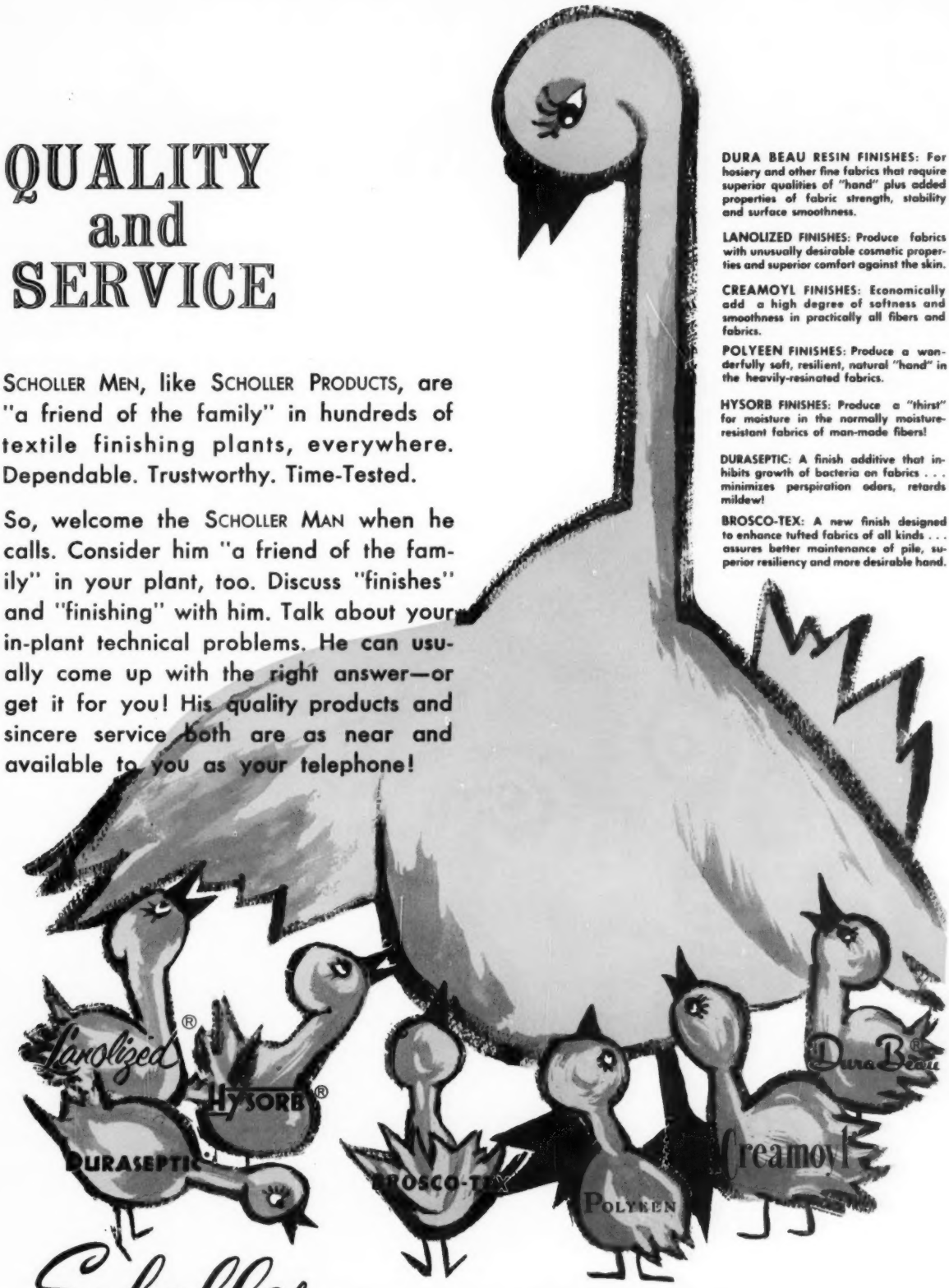

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